

American journal of numismatics.

New York : American Numismatic Society, 1989-

<http://hdl.handle.net/2027/inu.30000096179324>

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AMERICAN JOURNAL OF NUMISMATICS

15



Second Series

THE AMERICAN NUMISMATIC SOCIETY
NEW YORK
2003

AMERICAN JOURNAL OF NUMISMATICS

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ISSN 1053-8356
ISBN 8-89722-292-X

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THE APADANA COIN HOARDS, DARIUS I, AND THE WEST

PLATE 1

ANTIGONI ZOURNATZI*

For David Stronach

This paper supports a perception of the Apadana coins (IGCH 1789) as symbols of Darius I's control of important western sources of wealth and leading centers of western commercial/economic activity. It submits, among other things, that an interpretation of the coins as issues of states already under Persian sway by the time of the foundation of the Apadana need not imply a date as late as the 490s for the foundation of that building. References to important western holdings in this context most likely reflect the prestige that Darius, his Persian predecessors, and earlier Mesopotamian rulers attached to the conquest of far-off western lands.

THE DEBATE ON THE SIGNIFICANCE OF THE HOARDS

In 1933 the excavations of the University of Chicago Oriental Institute at Persepolis brought to light two foundation deposits whose contents to this day generate lively discussion and discord. The two deposits, buried, respectively, at the northeastern and southeastern corners of the great audience hall (the Apadana), contained each a pair of tablets, one of gold and one of silver, inscribed with identical trilingual (Old Persian, Elamite, and Akkadian) inscriptions of Darius I (522–486 BC) and

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encased in a carefully wrought stone box. In addition, beneath each box there was a group of archaic gold and silver coins. According to the systematic catalogue, published in Erich Schmidt's final report of the Persepolis excavations, these coins were four gold, light-weight "Croeseids", a tetradrachm of Abdera, and a stater of Aegina in the northeastern deposit, and another four light-weight "Croeseids" and three Cypriot double sigloi in the southeastern one (Plate 1).¹

Discussions of the find focused initially on the foundation inscription (conventionally designated DPh), which was deemed to offer a valuable (though still approximate) *terminus ante quem* for the construction of the Apadana and a useful datum for the otherwise loose chronology of the coins that were placed in the same deposits (Schmidt 1957: 110).² Awareness eventually set in that not only did the Apadana coins have value as potential chronological indicators, they might also be relevant to Darius' imperialist agenda.

In a footnote to his Apadana article published in 1985—thus, at an early moment of modern speculation about the coins' political significance³—David Stronach (1985: 444 n. 47) reflected on the possibility that coins (which were after all associated *par excellence* with the West at the time) "may have acquired, at least in the Achaemenid homeland, an extra value as symbols of distant Persian dominion". He indicated that "as such, certain (random?) examples would seem to have been picked out as suitable offerings for interment".

Stronach's suggestion is attractive for a variety of reasons. Inscribed tablets had long been employed in Near Eastern foundation deposits (Ellis 1968), but coinage is not attested in these early contexts.⁴ The coins in the foundations of the archaic temple of Artemis at Ephesus (Hogarth 1908: 74–93) might lead one to think that Darius was merely combining time-honored Near Eastern foundation ritual (i.e., the deposition of inscribed tablets) with a practice that was perhaps current in the West. There are, however, a number of indications that the Apadana coins represent more than reflections of the alleged Persian propensity for adopting foreign customs (Hdt. 1.134.3).

In the course of the 1970s, studies by Carl Nylander (1979) and Margaret Root (1979), in particular, drew wide attention to the highly planned character of

1. For a bibliography on the deposits, references to previous publications of the hoards, and details on their composition, see the Appendix.

2. The impact of the date(s) assigned to the DPh upon modern estimates of the chronology of the coins included in the deposits is especially discernible up to the 1970s (e.g., Kraay 1956: 48; Robinson 1958: 190; May 1966: 52; *IGCH* 1789; Price and Waggoner 1975: 37; Kraay 1976: 32).

3. For a still earlier speculation that the coins had a magical purpose, see Herzfeld (1938: 413–414).

4. Another possible early instance of the use of coinage in a Near Eastern foundation deposit also appears to date from the reign of Darius. This is a lightweight "Croeseid" that was reportedly "probably found together with another foundation document of Darius" at Ecbatana (Herzfeld 1938: 414–415).

Achaemenid political propaganda and to the instrumental role played by Darius himself in shaping its written and visual expressions. The system of meaning that pervades Darius' works would appear to have also influenced the character of the Apadana deposits.

The sculptured panels of the northern and eastern staircases of the Apadana register in visual terms Persian claims to world rule in depictions of no less than twenty-three subject delegations bearing tribute to the enthroned Persian king (Schmidt 1953: 85–90 plates 27–49).⁵ The Apadana foundation inscription conveyed a matching ideological message. In the brief text of the gold and silver tablets, the self-presentation of Darius I, son of Hystaspes, as a “King of Kings” and “King of Countries”, and the description of the kingdom, which he acquired by the favor of Ahuramazda, as extending “from the Scythians who are beyond Sogdiana, thence unto Ethiopia; from Sind, thence unto Sardis” (Kent 1953: DPh), were evidently also meant as a proud record of Darius' elevated status as a world ruler. Seen in this light, the coins in the same deposits, which were all minted in areas that had come under Persian sway by the reign of Darius,⁶ may also reference dominion.

Several considerations, however, have seemed to counter the interpretation of the coins as allusions to territories controlled by the Persians. In a widely followed opinion, at least some of the prolific, bimetallic lion-and-bull coinage, whose introduction was traditionally ascribed to the Lydian king Croesus,⁷ was minted by

5. Despite evidence for Xerxes' involvement in the later stages of construction of the building (below, p. 8), the reliefs are commonly held to have been at least designed under Darius I. Concerning the ideological significance of the reliefs, see the commentary of Root (1979: 227–284).

6. The conquest of Lydia by Cyrus the Great is related in Hdt. 1.79–84. If Xenophon is to be believed, Cyprus had gone over to the Persian side already during the reign of Cyrus the Great (*Cyrop.* 7.4.1–2, 8.6.8); it was certainly a subject at the time of Cambyses' attack against Egypt in 525 BC (Hdt. 3.19). Abdera must have been brought under Persian sway by Megabazus, who was left “General in Europe” following Darius' march against the European Scythians (Hdt. 4.143, 5.2, 5.10). The westernmost limit of Megabazus' conquests in the northern Aegean is indicated by Herodotus' statement that he advanced as far as the Axios River and received tokens of formal submission from the Macedonian king Amyntas (Hdt. 5.18.1). The conquest of the Aegean littoral of Thrace before Darius' return to Persia is implied by Histiaeus' request (set to the time when Darius was still at Sardis) for Myrcinus by the Strymon as a reward for guarding the Danube bridge (Hdt. 5.11.2, cf. 5.23–24). Aegina's offering of “earth and water” to the Persian King (commonly dated to 491 BC [e.g., Burn 1962: 226]) is mentioned in Herodotus' account of the preliminaries to the Marathon campaign of 490 BC (Hdt. 6.48). Aegina's loyalty to Persia during the 490s is postulated (without cogent reasoning) by Calmeyer (1989: 55) in the context of a thesis that the Apadana coins allude to Persia's allies during the Ionian revolt. A perspective on Aegina's still earlier political understanding with Persia is offered below (pp. 11–15).

7. This view can be traced to E. M. Cousin ry (cited in Mionnet 1833: 405 n. a) and Borrell (1839–40).

Darius and his Persian predecessors⁸ and served as a precursor to the distinctive “royal archer” coinage of the Achaemenids, which was presumably introduced sometime in the reign of Darius I. Viewed as an integral part of the “regal” coinage of the Achaemenids, the “Croeseids” were also liable perhaps to be interpreted as symbols of Persian, rather than Lydian, authority. Michael Vickers enlarged on the latter possibility with a further assumption. He posited that the entire lion-and-bull series was minted in the reign of Darius I, arguing among other things that Darius’ full authorship of that coinage was in keeping with his simultaneous introduction of a prominent lion-and-bull motif in the sculptured friezes that decorate the monumental staircases of the Apadana at Persepolis (Vickers 1985: 4–9; 1986: 243–253). In keeping with this assumption, Vickers (1985: 6; cf. 1986: 246) suggested that whereas the Apadana silver coins coming from Cyprus, Abdera, and Aegina were “clearly issues of states which, like the tribute bearers on the [Apadana] reliefs, were subject to the Great King at the time of burial”, the lion-and-bull emblem of the “Croeseids”, which were placed in the same deposits, represented a Persian “warning against rebellion”.

The interpretation of the silver coins as issues of subject states has also been challenged. The Apadana foundation inscription, wherein Sardis is mentioned as the uttermost western boundary of Darius’ realm (there being no references to the European holdings of Darius) was taken to imply, as early as the 1930s (Herzfeld 1938: 413; cf. Schmidt 1953: 40, 70), that the text was composed (and the building founded) before the beginnings of Persian expansion into Europe; hence, before the expedition of Darius I against the European Scythians (Hdt. 4.83–143), which is generally dated between 514 and 511 BC.⁹ In this reconstruction, Abdera and presumably Aegina, both of whose coins are present in the northeast deposit, would not yet have been placed under Persian rule. The annexation of Abdera was of course a direct consequence of the Scythian expedition (cf. n. 6). The

8. The hypothesis of a Persian involvement in the production of the “Croeseids”, already contemplated in the late nineteenth century (Head 1887: 546) but abandoned in view of the attribution of all “Croeseids” to King Croesus by Babelon (1893: ii–iii), was put anew by Jongkees (1944: 163–168) and Robinson (1958: 188). It was eventually suggested that all “Croeseids” were minted after the conquest of Sardis by Cyrus II (e.g., Price 1984: 214). A balanced overview of the available evidence concerning the authorship of the Croeseids up to about 2000 is offered by Le Rider (2001: 101–121, with earlier bibliography). On still more recent developments, see p. 6 and n. 13.

9. Proposed dates for the campaign range between 519 (Balcer 1972: 99–132; Cameron 1975) and “about . . . 510” (Frye 1962: 122). Arguments in favor of 519 have been convincingly refuted (Shahbazi 1982; Gardiner-Garden 1987: 326–330). A date of 514/13 derives from the Tabula Capitolina (*FGrHist* 252 [8]). The latest possible date of 511 BC is inferred from the account of Thucydides (6.59) regarding the marriage of the daughter of Hippias to the son of the tyrant of Lampsacus, Hippocles, whose reported influence with Darius was presumably forged during the Scythian expedition (Beloch² II.2: 60–61; Shahbazi 1982: 234–235).

chronological discrepancy seemed more pronounced in the case of Aegina, whose submission is commonly dated from a reference in Herodotus to 491 BC (cf. n. 6), thus some twenty years later than the latest possible date postulated for the Scythian campaign.

In the 1970s and 1980s, it began to seem appropriate to challenge the view that the foundation of the Apadana predated the Scythian expedition on the strength of archaeological and numismatic indications (e.g., Roaf 1974: 90–91; 1983: 138–139, 150–157; Stronach 1985: 443–444; 2000: 147; Vickers 1985: 6–7; 1986: 246–247; cf. Carradice 1987: 81; Price 1988: 241 no. 307 (b); Calmeyer 1982: 124; 1989: 51, 54–55; 2000: 574; Koch 1987: 151). This development was also held at the time to allow the suggestion that the building was founded after the submission of Abdera and Aegina (or after 491 BC [Vickers]). However, it is evident that the architectural and sculptural remains at Persepolis can lend themselves to widely divergent estimates of the foundation date of the Apadana,¹⁰ and, as we shall see, the chronological implications of the numismatic evidence can no longer be as readily harmonized with the presumed late date of Aegina's submission. On the other hand, as shown by subsequent defenses of the traditional chronology, the general perception of the DPh as providing an accurate statement of the "length and breath of [Darius'] empire at the time he began the Apadana" (Root 1988: 4) has been difficult to dispel.¹¹

Chronological difficulties seem to be directly responsible for more recent, nonpolitical approaches to the coins' significance. For Margaret Root (1988: 5, cf. 6, 11), for instance, the message intended in this instance "may have been related to the overarching concept of non-Persian wealth acquired, but not necessarily tied to a specific idea of actual political control". According to Martin Price (1989: 50) the coins were perhaps selected "not so much because their place of origin may

10. Hence, the contrasting assessments of the Persepolitan remains as fitting an early-fifth-century foundation date (Roaf 1983; Koch 1987) and as supporting a suggestion that the Apadana was founded by 512 BC (Jacobs 1997: 287–291, 298–299).

11. Perceptions of the DPh as an accurate record of the extent of Darius' holdings have led to two variant interpretations of the chronological implications. According to the traditional view, recently defended by, e.g., Root (1988: esp. 3–4; 1989: 38–39) and Kagan (1994: 41–43), the lack of references to European holdings places the text before the Scythian expedition. Other commentators, puzzled by the absence of Ionia, a western component of the empire since the reign of Cyrus the Great, have concluded that the text must have been composed during the Ionian revolt (Calmeyer 1982: 123–124; 1989: 51, 54–55; 2000: 574; Koch 1987: 151). Kagan (1994: 42, n. 48) is almost certainly right, however, in stressing the improbability that a Persian king would "formally relinquish what was once his". The inclusion of Thracians along with European Scythians and European Greeks on the list of throne bearers on the "south tomb" at Persepolis (assigned to Artaxerxes II [405–359 BC] by Mayrhofer [1978: 31 no. 7.3]; the text is Kent 1953: A?P) at a time when Persia no longer actually controlled European territory, may serve, as Badian (1998: 220) has suggested, as an example of the reluctance of Persian kings to "admit having ruled a smaller kingdom than their predecessors had".

have represented important boundaries of the Persian Empire, but because the types on them" could convey symbolic messages of import. As he stated, while the motif of the lion attacking the bull of Sardis has obvious implications, the symbolic referents of Abdera's griffin, the guardian of gold, and Aegina's turtle, emblem of its maritime power, may also have been recognizable in Mesopotamian contexts. Lately, leaning to the view that the coins were but a "miscellaneous group", Jonathan Kagan (1994: 40) suggested that "the selection was driven by a desire to match evenly, as with the inscribed tablets, gold and silver", and hence, that in this case "purity of metal was more important than mint or type".¹²

The opinions expressed so far underline the difficulties in arriving at any definitive interpretation of the intended significance of the coins, and the uncertainties applying in this case may be more extensive than recognized hitherto. One might question, for instance, the reliability of conclusions drawn from only two foundation deposits. The contents of, say, two further deposits (at the northwest and southwest corners of the building), which perhaps no longer survive (cf. Ellis 1968: 104), could significantly alter our perception of the gamut of coins used for the occasion. However, at least as far as the present selection is concerned, a political interpretation of the coins is arguably still possible to defend on the basis of new considerations.

THE SIGNIFICANCE OF THE APADANA "CROESEIDS"

Owing, not least, to the discovery in 2002 of two early "Croeseid" fractions, one in gold (of heavy weight) and one in silver, in a sealed destruction layer associated with the Persian capture of Sardis,¹³ we are now fully assured that "Croeseid" coinage was not a creation of Darius.¹⁴ Justified though it might have seemed on the strength of evidence that "Croeseids" continued to be minted under the Persian conquerors of Sardis, the possibility that the late lion-and-bull specimens buried in the Apadana deposits might still function as a surrogate Achaemenid coinage also seems remote today. That possibility was pressed in the past in the absence of firm evidence that archers were minted in the late sixth century. Indeed, until

12. Kagan (1994: 39–40) points out that two of the Cypriot coins have test cuts, a circumstance that implies their use as bullion, and notes that the contents of the hoards "provide just the sort of mixed group one would expect to find circulating in the Persian Empire in the last decades of the sixth century BC". The "miscellaneous" character of the group appears to have been generally taken for granted in earlier numismatic commentaries (e.g., Robinson 1958: 190; Kraay 1976: 32).

13. A coin discovered in the destruction debris in 1988 also proved on recent cleaning to be yet another silver "Croeseid" fraction. These important recent finds and their implications for the chronology of the early "Croeseids" and the archaic coinage of Asia Minor are discussed by Kroll (Cahill and Kroll forthcoming; summarily announced in Kroll 2003).

14. Earlier doubts concerning the validity of Vickers' identification of the "Croeseids" as Darius' own coinage were expressed by Root (1988: 5–8) and Stronach (1989: 256–257, 261–264).

1988 possible allusions to a relatively early date for the introduction of the archers could only be discerned in the consistently archaizing features of type I (depicting a half-length figure with a bow), which is now unanimously placed (following Robinson 1958: 188–190) at the beginning of the Achaemenid series, and which bears a notable stylistic affinity to the Behistun relief of Darius (Stronach 1989: 264–266) safely dated to the beginning of his reign (520–519 BC).¹⁵ However, hard evidence for the circulation of any Achaemenid coinage prior to 500 BC was altogether lacking.¹⁶

In 1988 Margaret Root published two sealings from a Persepolis Fortification tablet. The two impressions, made by the same seal, depict a kneeling, full-length, crowned figure shooting with a bow, which is the device of type II archers (Root 1988, 10–12, plate 1; seal 1393 on *PFT* 1495 [Hallock 1969]). The date on the tablet confirms that the type was already in existence by the twelfth month of the twenty-second year of Darius, thus by 500 BC. Today, conservative estimates of the chronology of Achaemenid coinage place its beginnings at c. 510 BC (Le Rider 2001: 128–133; cf. Price 1988: 241 no. 307a; Stronach 1989: 266; Calmeyer and Naster 1995: 405a), and that date could be further raised, even by a whole decade, if the archaic style of type I archers implies a closer chronological connection with Behistun.¹⁷

15. For a general overview of Behistun, see Stronach and Zournatzi (1997) with references.

16. Although hoard dates are generally only approximate (and may be subject to revision), the earliest datable finds of type I archers (all of silver) are those in the Bairakli (*IGCH* 1166) and Çal Dag (*IGCH* 1178) hoards that are currently assigned to not earlier than c. 500 BC and to c. 480 BC, respectively (Carradice 1987: 78–84, 79 table A, with an overview and catalogue of the finds of gold and silver archers in datable hoards). A recently published early hoard containing type I archers has also been dated to a “few years after 480 B.C.” (Carradice 1998: 1–12, plates 1–7 hoard A).

17. A close chronological connection of the first archers with the Behistun relief would, equally, allow the introduction of the royal figure on Darius’ coinage to be seen as an additional instance of Darius’ masterly use of iconography to legitimate his accession to the throne, as suggested by Vargyas (1999: 261; 2000: 38, 43). According to this same scholar (Vargyas 1999; 2000), indications for the introduction of Darius’ coinage at the very outset of his reign may also be provided by the Babylonian written record. Thus he suggests that the large number of references to *kaspu ginnu* (or “*ginnu* silver”) encountered in Babylonian economic documents from the first regnal year of Darius onward could refer to Persian sigloi. The suggestion is attractive but difficult to prove. The term is attested (however rarely) as early as the reign of Cyrus the Great (Vargyas 1999: 254, 263 fig. 1). Vargyas (1999: 258–259) believes that these early occurrences refer to “Croeseids”. Thus, even if one supposes, with Vargyas, that *kaspu ginnu* designated official silver employed in economic transactions (and the present writer is among those who favor this interpretation [Zournatzi 2000: 257–258]) and, moreover, that *kaspu ginnu* specifically denoted silver in coin form, there can still be no certainty that the term would only have been used of Persian sigloi throughout the reign of Darius.

As already noted by Root (1988: 11–12; 1989: 34–36, 43), these latter developments weaken the likelihood that Darius sought to include any coins of his own in the deposits.¹⁸ It would appear that there is still reason to view the eight gold Apadana “Croeseids” as allusions to Lydia¹⁹ and the sum of the Apadana coins as issues of foreign lands. Chronological considerations—be they related to the foundation of the Apadana or to the respective dates of submission of Abdera and Aegina—arguably do not speak against the further hypothesis that those foreign coins could constitute “strategic” references to western lands controlled by the Persians.

EVIDENCE FOR THE DATE OF THE FOUNDATION OF THE APADANA

In his detailed study of the Persepolis sculptures published in 1983, Michael Roaf undertook a review of the textual evidence for the early history of Persepolis. The review exposes the overall difficulty of documenting (with written testimony) any activity at the site before the Scythian expedition if one excludes the putatively crucial testimony of the DPh inscription.²⁰ Roaf (1983: 139) also drew attention to epigraphic indications for the date of the completion of the Apadana. These are two kinds of texts inscribed, respectively, on glazed bricks that were once set high on the corner towers of the Apadana and on prepared stone panels that flanked the reliefs at the base of the structure. Texts of the first kind state that Xerxes, the son and successor of Darius, continued the building work started by his father

18. Root also argues against the often-repeated assumption (e.g., Herzfeld, 1938: 415; Schmidt 1957: 110; Robinson 1958: 190; *IGCH* 1789; Kraay 1976: 32; Bivar 1985: 616–617; Calmeyer 2000: 574–575) that Darius would have included in the Apadana deposits specimens of his own coinage as a testimony for posterity and thus that the absence of archers in that context affords a reliable *terminus post quem* for the introduction of Achaemenid coinage. In all probability, Darius had the option of using his own archers.

19. Cf. also Root’s observations that “the eight gold coins evocative of the acquired wealth of Lydia [would be] a fitting inclusion along with inscribed tablets of gold and silver proclaiming proudly an empire which stretched from Sind all the way to Sardis” (1988: 11) and “[t]he rhetoric of the foundation symbolism is most likely to have emphasized an ideological substructure of empire based on allusion to power over non-Persian territories” (1989: 35).

20. Roaf (1983: 150) stresses, among other things, that the earliest (published) Persepolis Fortification tablets date from the thirteenth regnal year of Darius I (509/8 BC) (Hallock 1969: 74) and points out that the detailed list of subjects of the DPe, which is directly affixed on the south retaining wall of the Persepolis platform (Schmidt 1953: plate 7B) and might be associated with its construction, includes “the peoples who are across the sea” (Kent 1953: DPe 14–15) and thus possibly dates from after the Scythian expedition. A post-Scythian expedition date is also possible for the DPg (also on the south wall of the Persepolis platform [Schmidt 1953: plate 7D]), which refers to Darius’ control over countries that are *de ce côté-ci de la mer et de ce côté-là de la mer* (here presumably the Mediterranean Sea) (Lecoq 1997: 229–230).

(Schmidt 1953: 70–72, 82; Kent 1953: XPg); while texts of the second kind simply attribute the work to Xerxes without acknowledging any contributions by Darius (Schmidt 1953: 82–83, plate 60; Kent 1953: XPb). According to these texts, then, the Apadana, which was generally thought to have been founded by 511 BC at the latest, was still unfinished at the moment of Darius' death, some twenty-five years later. (Schmidt [1953: 70] estimated the duration of construction at some thirty years or longer.) This was already a strong hint that the generally accepted *terminus ante quem* for the foundation of the building might be mistaken. Roaf (1983: 138–139; cf. 1974: 90) promptly noted that the date of the Scythian expedition of Darius was conjectural. He also surmised that the lack of references to Darius' European holdings in the foundation inscription was not conclusive since "the inscription is extremely brief . . . and in such a short list the Scudra [commonly associated with the Thracians] might well have been left out because they were too unimportant or too unfamiliar to warrant inclusion".²¹

Of course, not everyone was convinced that the DPh was not meant "simply and unequivocally to state the four *extremities* of the empire" (Root 1988: 3). It is, however, at least a fact that to date there is still no conclusive evidence that that text was composed before the Scythian expedition of Darius.

In the more detailed rosters of subject peoples that survive from Darius' reign, references to Scudra (e.g., Yoyotte 1972: 256, 258 text 5b no. 17; Kent 1953: DNa 29, DSe 29), the "peoples who are across the Sea" (Kent 1953: DPe 14–15), "the Scythians who are across the sea" (e.g., Kent 1953: DNa 28–29, DSe 28–29), and the "Ionians who bear shields on their heads" (or "petasos-wearing Ionians", usually identified with the Macedonians who wore the *kausia*) (Kent 1953: DNa 29, DSm 10–11) indicate that there was no shortage of terms that Darius (or his scribes) could have used in the DPh to designate Persian possessions to the west of Sardis. There is also no certainty, however, that any of the designations encountered in the lists, or for that matter in any other known official Achaemenid document, adequately described the entire string of fragmented entities that came under Darius' control as a result of his Scythian expedition.²² Equally, there is no secure evidence that Darius' European holdings were organized into a separate

21. The view that the date of the Scythian expedition is not relevant to the dating of the foundation of the Apadana because Darius' empire is described on the tablets in the most general terms was also expressed by Calmeyer (1982: 124; cf. Vickers 1985: 4–5; 1986: 244). A similar explanation is offered for the simultaneous lack of reference to the Ionians by both Stronach (1985: 442–443) and Kuhrt (2002: 22).

22. The complex configuration of the northwestern frontier of Darius' empire should also warn us against an assumption (Kagan 1994: 42–43, n. 49) that, although it is always likely to have been administratively subordinate to Sardis, Scudra would still have been mentioned in the DPh if it had already been conquered—in the same way that Ethiopia (which presumably had an analogous administrative relationship to Egypt) was singled out for mention.

satrapy.²³ When the Athenians wished to make an alliance with the Great King in 508/7 BC (thus a few years after the Scythian campaign), they sent their envoys to the satrap, Artaphernes, of Sardis (Hdt. 5.73), who is elsewhere stated to have governed τῶν . . . ἐπιθαλασσίων τῶν ἐν τῇ Ἀσίῃ . . . πάντων (Hdt. 5.30.5) and to have also possessed the authority (albeit with Darius' permission) to mobilize an army with a view to conquering the Cyclades and Euboea (Hdt. 5.31–32). If the satrap of Sardis was the head figure of Achaemenid authority in the northwest, as he seems to have been from both the mainland Greek and Achaemenid points of view, Sardis might have represented the westernmost holdings of Persia in a collective sense.²⁴ Vickers (1985: 4) may well be right in postulating that “. . . the expression ‘from India to Sardis,’ rather than implying that the empire stopped at the latter city, probably includes the lands controlled from Sardis, the major satrapy capital at the western end of the Royal Road from Susa”.

In dating the Apadana, we are still largely dependent on the probable dating of the coins. And, at least in that domain, it has been possible to make some progress in recent years. Beginning with E. S. G. Robinson, Margaret Thompson, and Colin Kraay, whose opinions are cited by Schmidt (1957: 110), several numismatists felt that the advanced reverse type of the Cypriot issue ascribed to Lapethus (Plate 1 no. 39), could “hardly be earlier than the early fifth century BC”.²⁵ A second Cypriot coin (of Paphos?) (Plate 1 no. 38) was also placed by Martin Price and Nancy Waggoner (1975: 16; cf. Stronach 1985: 443; Carradice 1987: 80–81) in “the early fifth century” on the basis of comparable evidence from the Larnaca hoard. In the 1980s these numismatic estimates were thought to supply adequate grounds for challenging the traditional assumption (derived, as we saw, from the DPh) that the

23. Cf. the arguments of Balcer (1988) against earlier suggestions that Thrace was turned into a satrapy. A more recent conspectus of the evidence and earlier positions on the status of Thrace under Persian rule is offered by Zahrnt (1997).

24. Following this line of reasoning one would also be able to account for the corresponding lack of any reference in the DPh inscription to the Ionians, who are otherwise regularly mentioned in Darius' detailed lists of subject peoples, beginning with a listing in the Behistun inscription (Kent 1953: DB I 15, DPe 12–3, DNa 28, DSe 27–28; cf. DSf 33–34, 42–43, 48; Lecoq 1997: 246 DSaa par. 4).

25. At the time, the chronology of archaic coinage was (as it still is) too loose to sustain a direct refutation of Schmidt's dating of the deposits. Unwillingness to compromise numismatic judgment (however subjective, cf. Kagan 1994: 40) has surfaced nonetheless in subsequent discussions of the Apadana hoards. The coin in question has been treated as intrusive (e.g., *IGCH* 1879) despite the earlier dismissal of the possibility by Schmidt (1957: 110); or it has been thought to indicate that “even though the building was begun c. 515, and the plaques written before 513, the deposit in the SE corner of the building was not actually made until the end of the century” (Price and Waggoner 1975: 16; cf. Chryssanthaki 2000: 26, 154–157), a compromise shown to be unworkable on archaeological grounds (Stronach, 1985: 443). The difficulty of reconciling the coin's date with a foundation before 511 BC was acknowledged by Kraay, who acquiesced to Schmidt's early chronology of the deposits (Kraay 1976: 32) as late as the early 1980s (Roaf 1983: 139, n. 129).

building was founded before the Scythian expedition and directly accounted for the more specific inferences that the Apadana “must have been started in the last third of Darius’ reign”, “probably . . . early in the fifth century BC” (Roaf 1983: 139, 157), “after 500 BC” (Stronach 1985: 444), and possibly during the Ionian revolt (Koch 1987: 151).

Subsequent hoard evidence would argue for the limited value of stylistic criteria in determining the dates of the advanced Cypriot issues of the southeast deposit. The contents of the so-called 1990 hoard, published by Jonathan Kagan, indicate that “Cypriot coins with sophisticated obverse and reverse types and inscriptions are found with early one-sided coins of Aegina and Abdera” in hoards datable before 500 (Kagan 1994: 39, cf. 40–41). Analogous evidence is provided, as he noted, by the early Demanhur hoard (*IGCH* 1637, of c. 500 BC?). From Kagan’s study it emerges that the Cypriot issues of the Apadana can no longer be safely adduced in support of an early-fifth-century foundation (cf. Stronach 2001: 103, 109 n. 40; Meadows 2003: 343). If Darius used current coinage,²⁶ a date before 500 BC would be entirely possible for the burial of the deposits. By this estimate, which does not necessarily establish that the Apadana was founded before, as opposed to after, the campaign of Darius against the European Scythians,²⁷ there is ample room for speculation on the coins’ possible allusions to subject states.

AEGINA AND PERSIA IN THE LATE SIXTH CENTURY BC

It has been questioned whether Abdera and Aegina were really under Persian control at the time of the burial of the deposits. If the foundation did not predate the Scythian expedition, Abdera, which (as far as one can tell) was annexed in the immediate aftermath of Darius’ march against the European Scythians (and seemingly before his return to Persia [cf. n. 6]), could be counted among Darius’ possessions.

Judging by the current likelihood that the Apadana was founded by 500 BC, notions of actual political control would still seem difficult to apply to the stater of the Greek state of Aegina, whose submission is mentioned by Herodotus (6.48–

26. At least in the interpretation offered in the present paper, there is no reason to assume that the hoards were expressly composed of (literally or symbolically) antiquated money. See, for example, the analogy that is tentatively drawn by Root (1988: 7) with the (spit) money which, according to Aristotle (*Fragmenta varia* 481), was dedicated in the Argive Heraeum once it was superseded by the new coinage of Argos and the suggestions (Root 1989: 35; Vargyas 2000: 41) that the inclusion of Greek silver issues and gold “Croeseids” in the Apadana deposits could be intended to commemorate their replacement (as monetary media used in the empire) by the newly introduced Persian silver and gold archers, respectively.

27. This point is also adequately emphasized by Kagan’s statement (1994: 40) that “While . . . the [Apadana] coins cannot be used to provide a *terminus post quem* of 500 for the construction, it does not follow that they provide a reliable *terminus ante quem* for any date in Darius’ reign”.

49) in a passage that describes the preliminaries to the Marathon campaign and is commonly dated to 491 BC. One should be skeptical, however, about the notion that a political rapprochement between Aegina and Persia would have only come about in the late 490s.

Commercial interests provided a strong incentive for political relationships. In the mid-520s, at a time when Persian rule had not yet been firmly established in the Aegean, Polycrates of Samos voluntarily placed his men at the service of the Persian ruler Cambyses, who was then mounting a major expedition against Egypt (Hdt. 3.44). In so doing, Polycrates effectively joined the Persian camp, which made good sense for a tyrant whose state had high commercial stakes in Naucratis (Hdt. 2.178.3; cf. Braun 1982: 52). Herodotus reports that the Greek installation at Naucratis was subject from the outset to tight control by the Egyptian state. Its establishment (or formal organization) was subject to a pharaonic decree (Hdt. 2.178.1: “[Amasis] ἀπεδέξατο . . . καὶ . . . ἔδωκε Ναύκρατιν πόλιν ἐνοικῆσαι . . . ἔδωκε χώρους ἐνιδρύσασθαι βωμοὺς καὶ τεμένεα θεοῖσι”), and strict regulations applied to Greek commercial conduct (Hdt. 2.179).²⁸ Good state relations between Egypt and the principal Greek cities (Hdt. 2.178.2–3) whose commercial interests the emporium directly served²⁹ are not explicitly attested in all instances. They would nonetheless have been indispensable in the case of an emporium founded in foreign sovereign territory with consent of the local authorities, and we at least know that the home bases of the Greeks of Naucratis fell within the geographical compass of the Saïtes’ official friendships and alliances.³⁰

28. As shown by Loukopoulou (1999: 365–368) and Bresson (2000: 82–84), the settlement of Amasis admits close comparison with the stipulations attested in the treaty regulating the status of the Greek *emporitai* of the commercial installation at Pistiros in the Odrysian kingdom of Thrace (for the text, see Chankowski and Domaradzka 1999, with earlier bibliography).

29. The official participation of the founding cities of the κοινόν in Naucratis, at least until Herodotus’ time may be inferred (*pace*, e.g., Austin 1970: 31–32, 44–45) by their prerogative to appoint προστάτας τοῦ ἐμπορίου (Hdt. 2.178.3). The analysis of Bresson (1980; 2000: 74–84; cf. Loukopoulou 1999: 365–368; Möller 2000: 182–217; 2001) bears out the settlement’s double dependence on Egyptian (and subsequently Persian) authority, on one hand, and on the respective authorities of its several founding cities, on the other, until at least the late fifth century BC.

30. Before his entente with the ruler-to-be of Egypt, Cambyses, Polycrates of Samos was a *xenos* and ally of Amasis (Hdt. 3.39.2, cf. 2.182.1, 3.47.1). Formal relations with Miletus and Rhodes are indicated by the dedications of Necho at Branchidae (Hdt. 2.159.3) and of Amasis at the sanctuary of Athena at Rhodian Lindus (Hdt. 2.181.1, 3.47.3; *FGrHist* 532 F1 [29]). Ionia as a whole was a part of the political domain of Amasis’ Lydian ally, Croesus (Hdt. 1.77; cf. Xen. *Cyrop.* 7.32–45), and Egyptian collaboration with the Lydian kingdom is attested since the reign of Gyges (Radet 1893: 177–180; Braun 1982: 36–37). Passing remarks to Amasis’ financing of the rebuilding of the temple of Apollo at Delphi (Hdt. 2.180.2) and his gift of an elaborately embroidered linen corselet to the Lacedaemonians (Hdt. 3.47, cf. 2.182.1) afford additional indications of his friendly connections with southern Greece

There are no explicit references to Persian dealings with Naucratis once Egypt passed into Persian hands. However, state control of Naucratis commerce would not have lapsed.³¹ Greek trading privileges would have also continued to be subject to official agreement, and it is well known that the Great Kings did not enter partnerships of an equal type. Artaphernes' demand (Hdt. 5.73) that the Athenians offer "earth and water" as a prerequisite to concluding an alliance with Darius I in 508/7 BC implies that foreigners who contracted agreements with the Persian state were required to unconditionally recognize the superior status of the Persian ruler (Orlin 1976; Kuhrt 1988). Aegina, as one of the principal members of the Greek trading community at Persian-ruled Naucratis (Hdt. 2.178.3),³² was quite likely included in the Great King's domain as early as the last quarter of the sixth century.

Greek trading rights in the Persian empire are still poorly understood, and Aegina, which is cited as the only city of central Greece represented at Naucratis, may not have been a typical example. One should keep in mind that organized Greek commerce with the Persian regime was not always direct, and in the period discussed the bulk of Greek overseas trade was in the hands of the Ionians, who were subjects of Persia. Agreements in the Greek-speaking areas of Asia Minor,

and the Peloponnese, home territory of the commercial activity of the Aeginetans. Close relations between Corinth and Egypt would seem to be implied by the Egyptian name, Psammetichus, of Periander's nephew and successor (Sealey 1976: 52). Additional relations of Amasis with the Greek world are attested by his "friendship and alliance" with the inhabitants of Cyrene (Hdt. 2.181). On the necessity of good state relations between Amasis and the principal Greek cities trading with Egypt and on the significance of his dedications to Greek sanctuaries as expressions of such relations, see Bresson (1980: 319, 314).

31. The provision, stated by Herodotus (2.179) to have applied before his time, that ships sailing to the country use the Canopic mouth of the Delta and call at Naucratis, aimed no doubt to enable customs control. The appointment of special customs officials at the Canopic mouth of the Nile, which is attested as early as the reign of Amasis (Posener 1947; cf. the Egyptian $\phi\upsilon\lambda\alpha\chi$ of Hdt. 2.113–114), is held, with reason, to have continued under the Persian rulers (Yoyotte 1993–94: 683). The control (and exploitation) of foreign sea trade in the Persian period is attested by a maritime customs account, dated to the eleventh year of Xerxes or, perhaps, Artaxerxes I, from Elephantine (Yardeni 1994; Briant and Descat 1998; Bresson 2000: 67–69), as well as by the references to the taxes withheld on Greek imports passing through Thonis and on Naucratis products and transactions, in general, on a stele dated to the first regnal year (c. 380 BC) of Nectanebo I (Gunn 1943; Lichtheim 1980: 86–89; Yoyotte 1993–94: 680–683). Further indication of Achaemenid involvement in the affairs of Naucratis could be provided by a fifth-century bronze seal with an inscription in Aramaic rendering a Semitic personal name (PLṬ) (Petrie 1886: 41 no. 48, plate XX, 17). It has been suggested that it belongs to an official appointed by the Persian authorities to administer the affairs of the settlement (Yoyotte 1993–94: 680).

32. The date of the earliest Aeginetan activity at Naucratis is uncertain but has been suggested to have been possibly as early as the late seventh century BC (Sullivan 1996: 189–190). Concerning the role of the Aeginetans in Greek trade with Naucratis, see the reflections offered by, for example, Milne (1939: 179–181) and Braun (1982: 40).

Cyprus, and the Black Sea could be based on common ethnic descent or traditional metropolis-colony relations. Naucratis' establishment on foreign sovereign territory and her status at the time (above n. 29) would have precluded the option of an "indirect" Aeginetan agreement. The settlement of Amasis, recorded by Herodotus, indicates that the "chartered" (Braun 1982: 41) Greek presence at Naucratis was directly subject to the supreme authority of the Egyptian state.³³ Maritime trade was habitually exposed, furthermore, to the competition and rapacity of the power(s) that had "command of the sea". And, in this respect as well, the Persian-occupied southeastern Mediterranean—then largely in the hands of Phoenicians whose Mediterranean-wide conflict with the Greeks is well attested in our sources (Stylianou 1989: 421–425)—was a formidable domain for Greek outsiders who lacked the guarantees of formal treaties (cf. Meiggs 1972: 267–268; Badian 1987: 7). Greeks were highly sensitive to the requirements of an agreement with their imperial neighbor (cf. Badian 1987: 27–38).³⁴ Aeginetan concessions to Persia in the late sixth century would still be dictated by more weighty, pragmatic concerns.³⁵

This reconstruction need not violate Herodotus' report on the political understanding of Aegina with Persia on the eve of Marathon, which has long framed modern discussions of Aeginetan commercial activity at Naucratis in the late sixth and early fifth centuries.³⁶ Herodotus relates that Darius sent heralds to demand "earth and water" from mainland Greece and the islands when he was beginning preparations for the Marathon campaign, and that Aegina was among the states that consented to the demand. Taken at face value, his testimony could indeed im-

33. Cf. the early-fourth-century edict of Nectanebo I (above n. 31). The supreme authority of the Odrysian kingdom was apparently also a party to the treaty with the Greek *emporitai* at Pistiros (above n. 28).

34. Yet, even after the Persian wars, the friendship of the "barbarian" was evidently valued at least by the Argives (Hdt. 7.151).

35. Since the island itself of Aegina remained outside the radius of Persian military expansion, that relationship could only be relatively loosely defined, and loose definitions of control were possible in the Persian imperial system. See, for example, the cases of the Ethiopians, Colchians, and Arabians (Hdt. 3.97; cf. Briant 1996: 736–738), and of the island states of Cyprus under Cyrus (Xen. *Cyrop.* 7.4.1–2, cf. 8.6.8).

36. Both Figueira (1977: 174, 273) and Vickers (1985: 35), for instance, were alive to Aegina's concern for her trading enterprise in Naucratis. However, this is assumed to have affected Aegina's stance toward Persia only in the late 490s. The presumption that Aegina maintained an independent status after Naucratis came under Persian control also underlies the view that Aeginetan trade in Naucratis benefited from the "eclipse" of Samos and Miletus subject to their conquest by Persia (e.g., Figueira 1981: 147, 259–260, 271; Möller 2000: 76). As Georges (2000) has shown, the economic stagnation of Ionia before the Ionian revolt can no longer be taken for granted either.

ply that, at least as far as central and southern Greece was concerned, the question of an alliance with Persia presented itself for the first time on the eve of Marathon, and that that was also the earliest moment of Aeginetan agreement with Persia. However, since Athens was itself allied (however briefly) with Persia before 500 BC (Hdt. 5.73), his report obviously does not rule out earlier agreements. The general demand for “earth and water” of 491 BC, with which Aegina complied, was probably not merely meant to solicit new alliances on Greek soil in view of the upcoming Persian expedition against central Greece. It could have been meant, simultaneously, to reconfirm earlier friendships, stressed, not least, by the recently concluded Ionian revolt,³⁷ and to take a final count of Persia’s remaining adversaries.

The times would have also called for a certain measure of discretion. While ostensibly describing Greek affairs at large in the late 490s, Herodotus (6.49) names only the Aeginetans among the “many dwellers of the mainland and all the islanders” that consented to Darius’ demand and more specifically airs an Athenian grievance against Aegina. The Athenians (who themselves had courted Persian friendship in 508/7 BC but who championed the Hellenic cause by the time of the outbreak of the Ionian revolt in 499 BC) are reported to have sent to Aegina’s ally, Sparta, claiming that the Aeginetans had betrayed Hellas and requesting Spartan intervention (Hdt. 6.49.2). Given its Athenian bias,³⁸ the appeal recorded by Herodotus can hardly be expected to have alluded to still older dealings of Aegina with the enemy. Far from strengthening the Athenian case, such allusions would have invited direct comment about Athens’ own earlier “medizing”—and that is something that fifth-century Athenians would have at all cost tried to avoid.³⁹ In short, rather than fixing Aegina’s understanding with Persia to 491 BC at the earliest, the testimony of Herodotus could offer, instead, evidence that this important mercantile state was persistently inclined to align herself with the power

37. Herodotus places this particular demand for “earth and water” in the immediate succession of Mardonius’ efforts to regain control of the Aegean littoral of Thrace (Hdt. 6.43.4–6.45), a year after (Hdt. 6.43.1) Artaphernes’ settlement of the revolt in Ionia (Hdt. 6.42); on the chronology, see Beloch² II.2: 57–58.

38. Also signalled by the wording of Hdt. 6.49.2: [The Athenians] ἄσμενοι προφάσιος ἐπελάβοντο, . . . ἐς τὴν Σπάρτην κατηγορεῖν τῶν Αἰγινητέων.

39. See also Herodotus 5.73, wherein Athens’ offering of “earth and water” to Persia under Cleisthenes is expressly blamed on the personal (!) initiative of the Athenian envoys to Sardis. The passage is justifiably held by a number of modern historians to represent a fifth-century distortion of the events intended to absolve the Athenian *demos*, and the Alcmaeonids in particular, of responsibility for concluding an alliance that came to be regarded eventually as demeaning and treasonous (Badian 1994: 125–127; Berthold 2002: esp. 260, with references to earlier commentaries in the same sense in n. 6).

that ruled the East and Egypt in order to protect (and promote) her commercial enterprise.⁴⁰

DARIUS I AND THE WEST

Boasts of feats of conquest over and above those accomplished by one's predecessors were an essential element of Near Eastern imperialist proclamations. In such statements, claims of extraordinary expansion in the West appear to have held a special place. Sargon II of Assyria, the first Mesopotamian monarch to expand his dominion beyond the shores of the Levant, proudly proclaimed in a number of texts (including that engraved on a stele reportedly found on the island of Cyprus itself) that he received the submission of seven kings of Cyprus "in the sea of the setting sun", a land whose name his predecessors had not even heard of:

"... [Seven king]s of the land of Ia', a district [of Iad]nana (Cyprus), which [is situated] at seven days' journey [in the midst of] the sea of the setting sun and whose dwellings are distant—[since] far-off days [they had not paid?] the tax of Assyria, for none of the kings, my fathers [who preceded] me [had even heard the name of their land—they heard from the midst of the sea of [the deeds that I had performed] in Chaldea and the Hatti-land, and their hearts beat fast; their [trib]ute: gold, silver, [vessels of] ebony, boxwood, the treasure of their land, [into] Babylon to my presence, [they brought and] they kissed my feet..." (Cyprus stele, translated by Stephanie Dalley [Reyes 1994: 51])

The cachet of the Cypriot domain in official representations of the neo-Assyrian empire is also reflected in subsequent statements of Esarhaddon (e.g., *ANET*³ 291) and Ashurbanipal (e.g., *ARAB* II 340–341 paragraph 876) as well as in catchphrase descriptions of the Assyrian realm as extending from "sunrise to sunset" (i.e., from Dilmun "in the midst of the sea of the rising sun" to Cyprus "in the sea of the setting sun") (e.g., on the Cyprus stele [Reyes 1994: 53]. Cf. *ANET*³ 534; *ARAB* II 345 paragraph 889, 346 paragraph 893).⁴¹

The boundaries of Near Eastern imperialist expansion were dramatically re-defined by the conquests of Cyrus the Great and his Persian successors. No direct

40. The capability of imperialist powers to impose crippling restrictions on the commercial enterprise of their opponents is clearly illustrated by the Athenian decree banning the Megarians from the harbors of the Athenian empire and from the Athenian *agora* (Thuc. 1.67.4, 144.2; Meiggs 1972: 202–203, 266). Cline (1991) argued for a possible Hittite embargo against the Mycenaeans, and at least the prerogative of the rulers of later Near Eastern empires to regulate trading privileges within their realm is evidenced by the treaty of Esarhaddon with his subject ruler, Baal of Tyre (*ANET*³ 533–534). That Persian rulers would have refrained from such tactics seems hardly likely (cf. Bresson 2000: 69–73, with special reference to Naucratis).

41. On the more general notion of the marginality of eastern Mediterranean peoples in Near Eastern visions of imperial space, see Kuhrt (2002).

accounts survive of Cyrus' personal valuations of his western possessions.⁴² Still, the Graeco-Lyidian elements that are prominently featured in his architecture at Pasargadae (Nylander 1970; Stronach 1978: 11–23, 24–145 *passim*) would have brought to the heart of the Persian homeland the message of his total conquest of Asia Minor, previously largely outside the compass of Assyrian, Babylonian, and Median control. Cast though it may be in Herodotus' words, the opinion expressed by certain Persians, namely, "that Cambyses was the better man [by comparison to his father Cyrus] for he had kept all of Cyrus' possessions and had won, in addition, Egypt and the sea" (Hdt. 3.34.4), might also be perceived as a reflection of the prestige that the control of territories beyond the shores of Asia conferred upon the leaders of land powers based to the east of the Euphrates.

Darius could justifiably claim to be the first such leader ever to expand into Europe and he seems to have passed up no opportunity to do so. His crossing of the Bosphorus was commemorated with two stelae, which do not survive but whose texts recorded, according to Herodotus (4.87), all the nations over which he ruled. There can be little doubt that those texts also marked the acquisition of new territory, as did a further stele reportedly erected by Darius near the sources of the Thracian river Tearus (Hdt. 4.91).

Back in Persia, Darius' bid for the conquest of the West, which was to remain a constant preoccupation of his throughout his reign (cf. Burn 1962: 127–139) and which was passed on to his son and successor, Xerxes, was celebrated by the addition of a representative of Scudra among the personifications of subject peoples depicted on the base of his Egyptian-made statue excavated at Susa (Roaf 1974: 130–132, 251 plate 35.1), and it is possible to identify a Thracian delegation among the groups of foreign subjects paying homage to the king on the Apadana reliefs at Persepolis (Schmidt 1953: 89, plate 45, delegation 19, tentatively identified as Scudrians; *contra* Roaf 1974: 131–132). On the funerary relief of Darius at Naqsh-e Rostam, the "Scythians who are across the sea", as well as the Scudrians and "petasos-wearing Ionians", take their place among the supporters of the king's dais (Schmidt 1970: figure 44 nos. 24 and 25, figure 49 no. 26, respectively). Moreover, Darius' different overseas possessions were separately featured in his subject lists next to major holdings, such as Babylonia, Lydia, and Egypt, stressing—together with his important acquisition, Sind, in the east—his personal contributions⁴³ to the deserved claims that "the spear of a Persian man has gone forth far" and that "a Persian man has delivered battle far indeed from Persia" (Kent 1953: DNa 43–45 and 46–47, respectively).

42. It is at least interesting, however, that Cyprus appears, together with Egypt, as a western boundary in Xenophon's depiction (*Cyrop.* 8.6.21, cf. 8.8.1) of the elder Cyrus' empire as occupying the totality of the "inhabitable" portions of the earth.

43. Cameron (1975: 87) pointed out that the rosters were not meant to offer an "orderly enumeration of the various satrapies, but only a list of some groups of peoples whom the Great King or his bureaucrats deemed worthy of mention".

In the varied repertory of Persian representations of their western holdings, a place might well have been reserved for coinage. Cyrus the Great's scorn directed towards all Greeks "who have a place (i.e., a marketplace) set apart in the midst of their city where they perjure themselves and deceive each other" (Hdt. 1.153.1–3, trans. A. D. Godley, Loeb)⁴⁴ implies that from a Persian perspective a unifying perception of the ethnically diverse and geographically and politically fragmented territories of the West could be provided by those territories' economic practices, in which coinage was central. Darius, who was remembered by his fellow Persians as a "royal huckster",⁴⁵ and whose enthusiasm for western monetary practices is indicated by the introduction of his own coinage, might have been especially predisposed to use coins as a metaphor for his dominion of the West.

In that case, it would have made sense for him to choose specimens that would make both an ideological and an economic statement, and judging at least by the present selection, he might also be said to have chosen expertly. Lydia, whose conquest marked the beginnings of Persian westward expansion and which was to remain the Achaemenids' "flagship satrapy" (Weiskopf 1982) in the Northwest, was also home of the first "retail-merchants" and the earliest coins as well as the first to produce, among others, a valuable gold coinage from her abundant stores of electrum.⁴⁶ The island of Aegina and the city-state of Abdera were, in comparison, tiny spots on the map of the empire. Their coins, however, had far-reaching implications. Surplus silver acquired through Aegina's far-flung maritime commerce both in the East and in the West is held to have prompted her pioneering production of silver coins in Greece,⁴⁷ and Aeginetan coinage was established in

44. One could question whether the words Herodotus puts into Cyrus' mouth in this instance ought to be taken seriously as something that a Persian king would have said. The reported Persian aversion for marketplaces and for "buying and selling" (Hdt. 1.153.2) may still depict the typical Persian attitude, not least because it is repeated in Strabo (15.3.19) and Aelian (*Varia Historia* 10.14).

45. The expression was coined by Olmstead (1948: 185) after the characterization of Darius as a *kapelos* in Hdt. 3.89.3. This characterization appears to rest on the perception that, like a merchant, Darius was out for profit—a motivation suggested by his systematic imposition of annual taxes and "other like measures". As proposed by Tuplin (1991: 280) and Descat (1994), Darius' institution of a Persian coinage might also be relevant to his characterization as a *kapelos*.

46. See Hdt. 1.94.1, whose phrasing leaves open, however, the question as to whether, in addition to being the first *kapeloi*, the Lydians were responsible for the introduction of the earliest (electrum) coinage or only for the first coins minted in silver and in gold, respectively. On Lydian gold refining, see Ramage and Craddock (2000).

47. Greek tradition associated Aegina with the earliest coinage but in all probability she only introduced the first silver coinage (Kraay 1976: 42, 313; Figueira 1981: 65–80). An instance of her highly successful commercial enterprise is provided by the Aeginetan Sostatos, son of Laodamas, who held a record for profit-making out of trade (Hdt. 4.152.3). A succinct overview of the literary evidence on Aeginetan commercial activity in the Archaic period is offered by Möller (2000: 75–77, with earlier bibliography).

the Archaic period both as an international medium of exchange and as a prototype for Aegean monetary production.⁴⁸ Abdera, one of the most important Greek settlements in the northern Aegean and a stronghold of Persian interests in Thrace at least until the time of Xerxes' campaign against Greece (Isaac 1986: 89–90, with references), was also an important supplier in the late Archaic period of silver extracted from the rich Thraco-Macedonian mines and regularly traded in coin form (Kraay 1964; May 1966: 2–4; Chryssanthaki 2000: 26–59, 123–127). Finally, Cyprus, in addition to her undeniable prestige from of old as a symbol of extraordinary Near Eastern imperialist expansion, was, like Aegina, at the forefront of Archaic numismatic production (Kraay 1976: 301, 305) owing, no doubt, to surplus silver amassed largely through the lucrative international trade based on her native copper reserves.

As indicated in the beginning of this discussion, we may be dealing with only two, out of possibly four, deposits that were initially placed in the foundations of the building, and the two groups of coins found are not identical in every respect. There can thus be no certainty that we possess a definitive list of the types Darius used in this context. The stated associations of the specimens included in the present selection may still disclose a criterion of selection: the sum of the coins of the Apadana deposits could stand as symbols of Darius' control of important western sources of wealth and leading centers of western commercial/economic activity.

ACKNOWLEDGMENTS

The present paper was initially presented in the Gold Medal Colloquium "From Village to Empire in the Ancient Near East: Honoring the Contributions to Archaeology of David B. Stronach", held during the 105th Annual Meeting of the Archaeological Institute of America in January 2004 (Zournatzi 2004). John H. Kroll generously placed at my disposal his discussion of the important new "Croeseid" finds from Sardis in advance of publication. To him as well as to Kathleen McCaffrey, Louisa Loukopoulou, and one of the anonymous reviewers of this journal I further wish to express my debt for their valuable comments. Katerina Chryssanthaki kindly made available a copy of her doctoral dissertation on the monetary history of Abdera (2000). The latest publication on the Apadana coins by Andrew Meadows (2003) was brought to my attention with timely alacrity by Sophia Kremydi. For helpful suggestions and/or bibliographical references warm thanks are equally due to Hélène Cassimatis and James D. Muhly. Research for

48. The Aeginetan standard was used in central Greece (Boeotia, Phocis, Thessaly), the Peloponnese, the Cyclades, and Crete (Kraay 1976: 329 s.v. "Aeginetan"; Figueira 1981: 80–88). The possibility also remains open, however, that Aeginetan weights were disseminated even before the institution of minted coins as a result of Aegina's far-flung trading in silver and other commodities (Kroll 2001: 83).

the work was undertaken under the Operational Programme “Competitiveness” 2000–2006 (Action 3.3.1.2) of the Third [European] Community Support Programme.

References to the classical authors may be conveniently consulted in the Loeb editions unless otherwise indicated in the bibliography.

APPENDIX: THE APADANA COINS (*IGCH* 1789)

The Apadana foundation deposits, discovered by Friedrich Krefter during Ernst Herzfeld’s directorship of the Persepolis excavations (*Illustrated London News*, 22 February 1936, p. 328; Herzfeld 1938: 413–414), were first published systematically by Erich Schmidt (1953: 70, 79, 98 figure 42 A–B, 99 figure 43; 1957: 110, 113–114, plate 84 nos. 27–39). On the foundation inscription, see Kent (1953: DPh). The standard publication of the hoards is Schmidt (1957: 110, 113–114 [catalogue compiled by S. P. Noe et al.], plate 84 nos. 27–39). Subsequent comprehensive presentations of the coins were offered by Kagan (1994: 36–38, with a discussion of the import of current hoard evidence on the dating of the coins), and Meadows (2003, with supplementary information about their present disposition and about the weights and die axes of ten of the specimens). The contents of the hoards (as numbered in Schmidt 1957) are as follows (see Plate 1):

Northeast deposit: no. 27: Aeginetan stater (Asyut Group II, Price and Waggoner 1975: 69–76) (Herzfeld 1938: 414 figure B; Kagan 1994: 37; Meadows 2003: 342 no. 1); nos. 28–31: gold, light-weight “Croeseid” staters (Herzfeld 1938: 414 figure A; Kagan 1994: 37; Meadows 2003: 342 nos. 3–6); no. 36: tetradrachm of Abdera (period I, group II, May 1966) (Herzfeld 1938: 414 figure B; May 1966: 52, 60 no. 4/1; Kagan 1994: 37; Chryssanthaki 2000: 28–29; Meadows 2003: 342 no. 2).

Southeast deposit: nos. 32–35: gold, light-weight “Croeseid” staters (Herzfeld 1938: 414 figure A; Kagan 1994: 37; Meadows 2003: 343 nos. 10–13); no. 37: uncertain Cypriot mint, double siglos (Herzfeld 1938: 414 figure B; Kagan 1994: 37, plate 7B; Meadows 2003: 342 no. 7); no. 38: tentatively ascribed to Paphos, double siglos (Herzfeld 1938: 414 figure B; Kagan 1994: 37–38, plate 6C [cf. 28–30 no. 42]; Meadows 2003: 343 no. 8); no. 39: attributed to Lapethus (Robinson 1948: 60), double siglos (Kagan 1994: 38 [cf. 36 nos. 65–66]; Meadows 2003: 343 no. 9).

Nos. 28 and 31–39 are presently in the Iran Bastan Museum; nos. 27, 29, and 30 are reportedly kept in the Marble Palace Museum (Meadows 2003: 242–243).

No. 39 was discovered a few years later than the rest of the coins, when the test trench in which the southeastern deposit had been brought to light was re-

examined (Schmidt 1953: 79 n. 57). The possibility (contemplated in *IGCH* 1789 and Root 1988: 2–3) that the coin is intrusive is difficult to accept considering its find spot (Schmidt 1957: 110; Kagan 1994: 38). The hoards have also been reported to contain (only) four “Croeseids” and four Greek silver issues (Noe 1937: 212 no. 806; Schlumberger 1953: 11 no. 43, n. 1) or eight “Croeseids” and “eight miscellaneous Greek pieces in silver” (Robinson 1958: 190; echoed in Kraay 1976: 32). This inconsistency (cf. *IGCH* 1789; Root 1988: 2) is not unlikely to emanate from Herzfeld’s initial, ambiguous description of the find as consisting of “coins of gold and silver . . . deposited in fours” and from his lack of specificity about the number of the silver pieces (Herzfeld 1938: 413, 414: “the silver coins are of Greek cities, among them, for example, staters of Aegina, Abdera, and Salamis and Soli (in Cyprus)”). The coins ascribed by Herzfeld (on the basis of information received at the time from Robinson) to Salamis and Soli are nos. 37 and 38.

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THE SELEUCID COINAGE OF JOHN HYRCANUS I: THE TRANSFORMATION OF A DYNASTIC SYMBOL IN HELLENISTIC JUDAEA

PLATE 2

OLIVER D. HOOVER*

Although often seen as an imposition on John Hyrcanus I, the bronze coinage with the types of a lily (representing the Hasmonaeans) and anchor (symbolizing the Seleucid kings) struck at Jerusalem in the name of Antiochus VII should be reinterpreted as a sign of the Hasmonaean state's relative autonomy. This coinage ended with the death of Antiochus VII in 129 BC, but the anchor and, to a lesser extent, the lily reappeared on the coinage of Hyrcanus' son, Alexander Jannaeus, to illustrate the continuity of his reign with his father's. The anchor symbolism continued to be potent in Judaea after the fall of the Hasmonaeans, reappearing on several series of bronze coins struck at Jerusalem under Herod the Great. Even after Herod's death in 4 BC, the anchor emblem lived on, apparently now as a Herodian symbol. Again, the purpose seems to have been to express continuity and legitimacy.

During his invasion of Judaea, which probably began c. 135/4 BC, Antiochus VII Sidetes laid siege to the city of Jerusalem in an attempt to bring to heel the power of the Hasmonaean High Priests, which had grown largely unchecked during the Seleucid civil wars of the preceding two decades.¹ The defenders soon used up

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1. The date of the siege is problematic because Josephus (*AJ* 13.236) reports Antiochus' invasion of Judaea in the first year of Hyrcanus and the fourth of Antiochus (135/4 BC) as well as the 162nd Olympiad (beginning in 132 BC). A date around 134 BC may be preferable since dated Seleucid coins were struck at Jerusalem in 132/1 BC, probably preceded in 133/2 by an undated series, and Josephus (*AJ* 13.237) suggests that the siege lasted for about a year.

their supplies, forcing their High Priest, John Hyrcanus I, to accept Antiochus' terms for ending the siege. The king demanded payment of an indemnity, totaling 1,000 silver talents, the taking of hostages, and the destruction of Jerusalem's defensive walls (Jos. *AJ* 13.236–248; Diod. 34.1; Just. 36.1.10; Eus. 1. 255). In the same year as the capitulation of the city a Seleucid bronze mint opened in Jerusalem,² a remarkable event not only for the circumstances of its operation but also for the typology of its coins.

Although Jerusalem had been a Seleucid possession since the end of the Fifth Syrian War (202–193 BC) and had been garrisoned between 163 and 139 BC, there is no solid evidence for a mint in the city during this period of direct Seleucid rule or after 131/0 BC. Bronze coins issued in the name of Antiochus VIII (Plate 2 no. 1) (Meshorer 1974: 59–61; 1982a: 40–41) and Antiochus IX (Narkiss 1938: 127, 165), formerly linked to Jerusalem, have been reattributed to the mint of Ascalon (Houghton and Spaer 1998: nos. 1166–1167; Houghton 1983: 83 n. 1). One might reasonably have expected a mint during the period of direct Seleucid occupation, if only to produce money to pay the mercenaries installed in Jerusalem's Akra, but it is odd that a mint should appear only after the fall of the city to Antiochus VII.

Some modern commentators have seen the terms of the peace agreement imposed on Hyrcanus as harsh (de Sanctis 1960: 204–206; Tcherikover 1974: 240; Green 1990: 535–536), but a close reading of Josephus (*AJ* 13.247) shows that Antiochus did little more than claim financial restitution for his earlier loss of Joppa and Gazara to the Hasmonaeans, and discourage further Jewish expansion at the expense of Seleucid possessions (Grainger 1997: 96; Rajak 1981: 71–72; Bevan 1902: 239, 241). Some opponents of the “harsh” interpretation have suggested that Antiochus VII was prevented from restoring Judaea to Seleucid control and making further exactions by his fear of Roman intervention (Rajak 1981: 65–81; Schürer 1973: 204–205), but the argument founders on the habitual failure of the Romans to act decisively on Seleucid and Judaeian affairs in the late second century BC (Sievers 1990: 138–139; Gruen 1984: 750–751).

The silver demanded of Hyrcanus by Antiochus VII is the same sum that he required of Hyrcanus' father, Simon Thassi, in compensation for the loss of Joppa and Gazara as well as for war damages (1 Macc. 15.31). Payment for territory had been a feature of earlier Seleucid-Hasmonaeian alliances (1 Macc. 11.28, 34; Jos.

2. Find spots in Jerusalem and the surrounding area make it almost certain that Jerusalem was the issuing mint (Ariel 1990: 111–112; 1982: 280–281). Fischer (1983: 9–22) argues that portrait/Athena Nikephoros tetradrachms of Antiochus VII with the dates SE 181 and 182 (132/1 and 131/0 BC) and a particular monogram (resolved as YPKAN[OY]) were struck in Jerusalem by John Hyrcanus I to pay Antiochus VII. However, the fact that the series with this, or obviously related monograms, bears dates as early as SE 175 (138/7 BC) makes Fischer's theory difficult to support (Houghton et al., in press).

AJ 13.125) and therefore should not be considered a serious imposition. Nowhere does Josephus report the return of Joppa and Gazara to Antiochus VII (*pace* Tcherikover 1974: 240; Green 1990: 535). The destruction of Jerusalem's walls and the taking of hostages and weapons were intended to hamper Hyrcanus' ability to make war outside of Judaea.

John Hyrcanus I retained all Judaeian and conquered Seleucid territories while avoiding the imposition of garrisons and any Seleucid interference in the internal political affairs of the country (Jos. AJ 13.245–247). That Antiochus VII recognized Hyrcanus' practical autonomy is implied by their formation of a military alliance (φιλία καὶ συμμαχία) (Jos. AJ 13.249; for discussion of Seleucid alliances with autonomous political entities, see Ma 1999: 164–165). The same type of alliance had existed between Antiochus VII and Simon (1 Macc. 15.1–9; Jos. AJ 13.223), as it had between Simon's brother, Jonathan Apphus, and several other Seleucid kings (Alexander I: 1 Macc. 10.15–20; Jos. AJ 13.43–45; Demetrius II: 1 Macc. 11.42–53; Jos. AJ 13.134–142; Antiochus VI: 1 Macc. 11.57–59; AJ 13.145–147). In these earlier instances of Seleucid-Hasmonaean cooperation, the request for φιλία καὶ συμμαχία always came from the Seleucid king, needful of Jewish military support, and invariably involved grants of special privileges to the Jews and their Hasmonaean leaders. It was left to the Hasmonaean to accept or reject such proposed alliances (1 Macc. 10.46–47), something that would have been impossible if Judaea had not been autonomous and for the most part free from direct Seleucid control. Thus, John Hyrcanus I should probably be classed with other local rulers at the edges of Seleucid authority who were truly autonomous, except when the Seleucid king was in close enough proximity to enforce his will (cf. the case of Antiochus III and Euthydemus of Bactria: Polyb. 11.39.1–10; Lerner 1999: 51–52).

There is no reason to suspect that Hyrcanus' Seleucid alliance was any different from those of his predecessors. Antiochus VII needed Jewish troops for the projected Parthian campaign of 130–129 BC, just as he had previously needed them for the war against Tryphon, and as Alexander I had needed them against Demetrius I. In return for his military support, we should reasonably expect that Hyrcanus also received rights and privileges similar to those enjoyed by earlier Hasmonaean allies. Hyrcanus' status was high enough that during the Parthian war he could compel Antiochus to delay pressing his advantage against the enemy in Assyria for two days in order to permit the celebration of the Sabbath and Pentecost according to Jewish Law (Jos. AJ 13.251–252). Whether he was accorded the status of royal Friend is unknown, but likely, based on his ability to prevail upon the king on this occasion and the fact that Simon and Jonathan had both been Friends. Thus, despite being somewhat de-fanged by the destruction of Jerusalem's walls, at the conclusion of the siege the position of Hyrcanus was not much different from that of Simon in 138.

As we have seen, the peace agreement lacked the severity which is often accorded to it, yet the “harsh” school of interpretation still colors our understanding of the bronze coinage (Plate 2 nos. 2–4) struck at Jerusalem in the name of Antiochus VII from 132/1–131/0 BC (Houghton and Spaer 1998: nos. 2133–2150).³ It has been suggested that the mint and the coinage that it produced was imposed on John Hyrcanus as tribute to Antiochus VII, a symbol of his subjection to Seleucid authority (Meshorer 1982a: 39–40 [slightly softened in Meshorer 2001: 30]; Hoover 1994: 42–46). Following this view, the typology of the coins and the power discourse that it expresses should be considered in parallel to that of some of the bronze coinages produced by the Phoenician cities under Seleucid rule.

The quasi-municipal bronze coins of Phoenicia follow a pattern similar to that of the Jerusalem coinage. They too generally carry the name of the Seleucid king and a type representing his authority (usually his portrait), as well as a local or civic symbol (e.g., Houghton and Spaer 1998: nos. 662–684, 1070–1099, etc.), such as the club of Heracles-Melqart at Tyre (Plate 2 no. 5) or the god Kronos-El at Byblus (Plate 2 no. 6). At Jerusalem the well-known dynastic anchor badge of the Seleucids is used to symbolize the power of Antiochus VII, no doubt in deference to Jewish law forbidding the artistic depiction of living things (Exod. 20.4; Deut. 4.16–18; Meshorer 2001: 31). The symbol matched with the Seleucid anchor is a lily flower, widely recognized as a traditional emblem of Judaea. Many of the accoutrements of the First and Second Temples, including the sacred pillars, Jachin and Boaz (1 Kings 7.19, 22; Jos. *AJ* 8.3.4), as well as the Solomonic “molten sea” (1 Kings 7.26) and the Hellenistic Shew-Bread Table (*Letter of Aristeas* 68, 75) were decorated with lilies. Indeed, if B. Bar-Kochva is correct in his dating of the *Letter of Aristeas* (Bar-Kochva 1996), the description of the Shew-Bread Table may be specific to the time of John Hyrcanus I. Because of the close association between the flower and the Temple, “it soon came to symbolize both the building itself and Jewish civilization in general” (Meshorer 1982a: 30). During the fourth century, the lily also appeared on satrapal coins (Plate 2 no. 7) as the emblem of the Persian province of Yehud (Judaea) and its capital at Jerusalem (Meshorer 2001: 8–10 and nos. 6–6a, 12–15a; 1990–91: plate 17 nos. 1–2).

While there can be little doubt that here we have symbolic expressions of both Seleucid royal identity and regional Jewish identity on the same coin series, it is far from clear that they are intended to interact in the same manner as they do on the coinages of the Phoenician cities. If a Seleucid mint was thrust upon Hyrcanus as

3. The unique date SE 178 (134/3 BC) described in Houghton and Spaer (1998: no. 2133) is invisible in the plate photograph and cannot be confirmed. It is most likely an erroneous reading. The coins dated SE 183 (130/29 BC) reported by Meshorer (1982a: 39) do not actually exist. Meshorer (2001: 30) only indicates issues of 132/1 and 131/0 BC. The undated coins may precede the issues of 132/1.

a form of punishment, it is strange that the coins that it produced do not conform to the normal pattern of Seleucid quasi-municipal issues. On the Jerusalem coins the local lily emblem appears on the obverse, the side normally reserved for the royal portrait.⁴ One might consider the lily of Jerusalem to have usurped the traditional place of the Seleucid king on the coinage. At the same time, the removal of the Seleucid anchor to the reverse along with the royal inscription destroys the paradoxical juxtaposition of royal inscription and local symbol, frequently used to express overarching Seleucid authority on the quasi-municipal coinages of Phoenicia. These discrepancies, when combined with Antiochus' general policy of non-intervention in the internal affairs of Judaea, tell against the idea of the Jerusalem coinage as a symbolic reminder of Seleucid suzerainty. The fact that the coinage ceased immediately upon the departure of Antiochus for the East in 130, rather than upon the Seleucid king's death in 129, also tends to point to a local rather than royal impetus for its issue.

It is tempting to suggest that Hyrcanus was granted the right to coin as part of his alliance treaty with the king. Earlier, while preparing for his invasion of Syria in 138/7 BC, Antiochus VII had written to Simon, hoping to forge a Seleucid-Hasmonaean alliance against Tryphon (1 Macc. 15.1–9; Jos. AJ 13.223). In this letter, Antiochus promised various rights and privileges to the Jews and to Simon personally, among which was the right “to strike money with your own stamp (κόμμα ἰδίου) for your own country” (1 Macc. 15.6). However, Simon never had the opportunity to make use of this right because of his dispute with Antiochus over possession of Joppa and Gazara and finally his murder at the hands of his son-in-law in 135/4. Perhaps, around 132, Hyrcanus received from Antiochus VII the same privileges that had been promised to his father in 138/7. It was common Seleucid practice to confirm the rights of cities and local rulers that had been enjoyed under earlier kings (Bikerman 1938: 335–349; Ma 1999: 111–113). Demetrius II confirmed the territorial and status concessions that had been made to Jonathan by Alexander I (1 Macc. 11.26–28), and Antiochus VII also recognized all the rights and privileges accorded to Simon and the Jews by his predecessors (1 Macc. 15.5). If our assessment of Hyrcanus' position is correct, then perhaps the lily type of the Jerusalem coins should be understood as the κόμμα ἰδίου of the Hasmonaean state under John Hyrcanus I. The presence of the Seleucid anchor and the inscription naming Antiochus served to respectfully acknowledge the source of the privilege.

4. This feature is overlooked by Meshorer, who consistently and erroneously describes the anchor type as the obverse and the lily as the reverse (Meshorer 1982a: 160; 2001: 30). Close examination of the coins clearly shows that the lily type was carved into the obverse (anvil) die and the anchor type was carved into the reverse (punch) die. The correct die relationship is maintained for Houghton (1983: nos. 831–834) and Houghton and Spaer (1998: nos. 2133–2150).

After Antiochus was killed by the Parthians in 129, or perhaps more likely, a year earlier when the Seleucid king was already fully engaged in the East, John Hyrcanus resurrected the expansionist policies of his father and attacked the cities of Samaritis as well as Nabataean and Idumaeen possessions (Jos. *AJ* 13.254–258; *BJ* 1.62–63; Finkielsztein 1998: 45–60).

The Hasmonaean-Seleucid alliance was broken and the lily and anchor coinage in the name of Antiochus VII was never restored. It was replaced by a fully autonomous Jewish coinage, devoid of allusion to the Seleucids through either symbols or inscriptions. Even Greek epigraphy was eschewed for a traditional paleo-Hebrew script, identifying John Hyrcanus I (“Yehoḥanan the Priest”) and the Council of the Jews (יהודן הכהן הגדל וחבר יהוד) as the issuing authority (Meshorer 2001: nos. A1–J4). The lily badge of Judaea and Jerusalem reappears, paired with a palm branch (Meshorer 2001: nos. J1–J4), on a small group of Hyrcanus’ coins (Plate 2 no. 8), but the majority depict symbols of high priestly authority, such as the pomegranate flanked by cornucopiae (Plate 2 no. 9) (Meshorer 2001: nos. D1–G15, I1–I66). The Seleucid anchor never resurfaces again in connection with John Hyrcanus I.

The later numismatic history of the lily and anchor iconography in Judaea provides an ironic epilogue to the story of its development and symbolic implications under John Hyrcanus I. His son Alexander Jannaeus took power at Jerusalem in 104 BC (Van ‘t Dack et al. 1989: 118–121) and was troubled by the opposition of his own people throughout most of his reign. He was so ill regarded by many Pharisees and their supporters that they invited the Seleucid king, Demetrius III Eukairos, to aid them against Jannaeus (Jos. *AJ* 13.376; *BJ* 1.92). Jannaeus was also said to have been hated by his own father and was accused of being a “descendant of captives” (Jos. *AJ* 13.321–322, 373). One suspects that it was in the context of this criticism that Alexander Jannaeus struck coins (Plate 2 no. 10) reminiscent of the lily and anchor coinage of 132/1–131/0, evidently hoping to advertise his legitimacy and a positive connection to his father. This interest is also underlined by his resurrection of Hyrcanus’ lily and palm branch coinage unchanged except for the inscription (Meshorer 2001: nos. O1–O4). Both series were probably produced early in Jannaeus’ reign in an attempt to identify himself as a legitimate successor (*pace* McLean 1981: 158–161, who places them in the late period).

Alexander Jannaeus employed the same lily and anchor combination as his father, but on the new coinage inscriptions appeared on both obverse and reverse (Meshorer 2001: nos. N1–N5). In connection with the obverse lily, Jannaeus is identified, in paleo-Hebrew script, as יהונתן המלך (“Yehonatan the King”); while on the reverse the coin is described in Greek as ΑΛΕΞΑΝΔΡΟΥ ΒΑΣΙΛΕΩΣ (“[the coin] of Alexander the king”). The placement and types of inscription are notable, because at the same time that the combination of lily and anchor was associated

with John Hyrcanus I, the former was understood as a Jewish symbol and was therefore paired with a Hebrew inscription, while the latter appears to have maintained some of its Seleucid connotation and was matched with a Greek inscription. However, at the same time that the anchor retained some vestige of its original "Seleucidness" (for lack of a better word), it also appears to have acquired a degree of legitimacy as a Hasmonaean Jewish symbol through its connection with Hyrcanus, the architect of Judean territorial expansion.⁵ Not only did Jannaeus "quote" the combination of lily and anchor as a discrete symbolic unit in imitation of his father, but he also had no concerns about separating the anchor from the lily and pairing it with a new symbol, a star surrounded by a diadem (Meshorer 2001: 37–38 and nos. K1–L17), apparently a personal emblem of Jannaeus' kingship (Plate 2 no. 11). The fact that the anchor could be safely divorced from the lily and reused elsewhere in combination with another symbol indicates that it was largely understood as an acceptable Jewish emblem. Alexander Jannaeus was no Seleucid ally and had no reason to strike coinage honoring the last scions of the dying dynasty (*pace* Miller 1994: 148–153).

Some authorities have interpreted the anchor on the coinage of Jannaeus as a symbolic reference to his conquest of the coastal cities of Raphia, Anthedon, and Gaza around 96 BC (Jos. *AJ* 13.357–364; *BJ* 1.87; Meshorer 2001: 37; Hendin 2001: 124). However, it is not at all clear why he should have wished to emphasize these victories over his later conquests in Gaulanitis, Idumaea, and Nabataea in the 90s and 80s BC (Jos. *AJ* 13.356, 393–394, 14.18; *BJ* 1.86, 104–105). According to Josephus, it was after the latter victories that the Jews welcomed their king (Jos. *AJ* 13.394; *BJ* 1.105), whereas following the earlier capture of the coastal cities, Alexander Jannaeus had been met with revolt (Jos. *AJ* 13.372; *BJ* 1.88). It seems far more likely that Jannaeus simply inherited the anchor from his father, who adopted it from Seleucid royal iconography (cf. McLean 1981: 154–155; Kindler 1954: 173–174; Reifenberg 1947: 15).

After the death of Jannaeus in 76 BC, the combination of infighting between his sons, Judas Aristobulus II and John Hyrcanus II, and the beginning of direct Roman involvement in the affairs of Near Eastern states in 64 BC hastened the decline of the Hasmonaean dynasty. During this troubled period, Antipater, the politically astute strategos of Idumaea, made himself and his sons indispensable agents of Hyrcanus II, becoming his trusted assistants in the struggle against Aristobulus II and his heirs. Antipater's eldest son, the future Herod the Great, learned early on that connection to the Hasmonaean dynasty was the key to maintaining the appearance of

5. This reuse of the Seleucid anchor with added Hasmonaean symbolic value is in accord with the theory of the "migration of live symbols" described by Goodenough (1954: 35–36).

legitimate authority in Judaea (Jos. *AJ* 14.163–184; *BJ* 1.208–215). Without them, Herod was doomed to criticism for his common ancestry and perhaps even for the authenticity of his Judaism.⁶ In order to maintain an aura of legitimacy, in 37 BC Herod married Mariamne I, the granddaughter of Hyrcanus II (Jos. *AJ* 14.300, 467; *BJ* 1.241, 344; Richardson: 1996: 43–44, 122; Hanson 1989: 144–146; Grant 1971: 42–44), and maintained a rocky relationship with his Hasmonaean in-laws until they became foci for rebellion and were executed (Jos. *AJ* 15.50–56, 247–249; *BJ* 1.437). Herod's two sons by Mariamne I even received the Hasmonaean dynastic names Alexander and Aristobulus, further underlining his association with the family. Unfortunately, the boys took much pride in their Hasmonaean descent and lorded it over Herod's other sons (Jos. *BJ* 1.435, 445, 468, 479), thereby setting the stage for their own executions in 7 BC (Jos. *AJ* 16.394; *BJ* 1.55).

Herod advertised his connections with the Hasmonaean in the same way that Alexander Jannaeus had advertised his descent from John Hyrcanus I, by the re-use and manipulation of established symbols. To this end, he produced a coinage pairing the popular Hasmonaean cornucopiae emblem with the anchor (Plate 2 no. 12) (Meshorer 2001: nos. 59–66; Meshorer 1982b: 26 and nos. 17–17m).⁷ The previous appearance of the latter on the coins of both Hyrcanus I and Alexander Jannaeus had apparently given it the status of a recognized Jewish and Hasmonaean symbol (Meshorer 2001: 67). Presumably this coinage ceased after 29 BC, the year in which Herod executed Mariamne I on charges of adultery (Jos. *AJ* 15.218–239; *BJ* 1.438–444), or, perhaps more likely, after the execution of her sons in 7 BC. After their deaths, there would have been little point in Herod trying to advertise his Hasmonaean connections.

6. For Herod's concern over his own legitimacy in the face of his Hasmonaean opponent Mattathias Antigonus, see Jos. *AJ* (14.489–491). Antigonus had accused Herod of being a commoner and a “half-Jew” (ἡμιουδαῖος) before Poppaeus Silo in an attempt to undermine Herod's new kingship in 39 BC: *AJ* 14.403–404. There is some question as to what the term ἡμιουδαῖος actually meant in the context of the first century BC (Richardson 1996: 52–53).

7. Meshorer (2001: 70, nos. 65–65b) is probably correct when he surmises that when the anchor type is paired with a ship on other coins of Herod it is intended merely as a nautical emblem in celebration of the founding of Caesarea Maritima. The anchor appeared on the later coins of Caesarea under Herod Agrippa I and Claudius (Meshorer 2001: nos. 123–123a; Burnett et al. 1992: nos. 4848, 4981). It is unclear whether Herod's coins using the types of an anchor on the obverse and the Greek inscription ΒΑΣΙΛΕΥΣ ΗΡΩΔΗΣ on the reverse (Meshorer 2001: nos. 60–64; Meshorer 1982b: nos. 18–21) are intended to echo Alexander Jannaeus' lead coins, which depicted an anchor on the obverse with the legend ΑΛΕΞΑΝΔΡΟΥ ΒΑΣΙΛΕΩΣ and on the reverse the Aramaic inscription מלכא אלכסדרוס (Meshorer 2001: nos. M1–M3; Meshorer 1982a: nos. Da1–Db1). Ariel (2000–02: 122–124) does not regard the cornucopiae/anchor type as a modified continuation of Hasmonaean iconography, but prefers to see it as associated with the dedication of Caesarea Maritima.

Somewhat surprisingly, the anchor symbol was again resurrected after Herod's death in 4 BC. Herod Archelaus I, his son by the Samaritan Malthace, was appointed ethnarch of Judaea, Samaria, and Idumaea by Augustus in accordance with Herod's will but still had difficulty presenting himself as the legitimate ruler of the region. At the reading of Herod's will, Archelaus' appointment was hotly contested by his brother Herod Antipas and other members of the Herodian family who would rather have seen anyone but Archelaus as ruler of his father's territory (Jos. *AJ* 17.224–240; *BJ* 12.20–33). It is probably in this context that we should understand Archelaus' restoration of the anchor badge of Herod the Great's Hasmonaeen-style coinage (Plate 2 no. 13) (Meshorer 2001: nos. 67–69c; Meshorer 1982b: nos. 1–2c). The symbolic value of the old Seleucid anchor was again modified, transforming it from an emblem of Hasmonaeen legitimacy to a symbol of Herodian continuity. Thus, through the vehicle of John Hyrcanus I, the true founder of Judaeen autonomy from the Seleucids, a traditional emblem of the Seleucid dynasty and its royal authority was transformed into a legitimating symbol for heirs of and pretenders to the Hasmonaeen nationalist dream.

ACKNOWLEDGMENTS

The author would like to thank Donald T. Ariel (IAA), Danny Syon (IAA), Arthur Houghton, and Claude Eilers for sharing their thoughts on an earlier draft of this paper, which was originally presented at the XIII International Numismatic Congress, Madrid, 15–19 September 2003. Thanks are also due to David Hendin for permission to use images from his *Guide to Biblical Coins* (pl. 2 nos. 8–14) for illustration. All conclusions are the sole responsibility of the author.

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SUPPLICATION ON ROMAN COINS

PLATE 3

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Recent discussion of supplication on Roman coins, especially coins of the late Republic, has overestimated prosopographical and political factors and underestimated religious ones, as shown by an analysis of a denarius minted by M. Aurelius Scaurus in 58 BCE. Coins like this denarius express conventional religious values and serve the purpose of promoting the minter or other political figures only to the degree permitted by the way in which the act of supplication is depicted. This depiction, in turn, depends on the interplay of religious scruples and the structure of supplication, a practice with four distinct steps.

Acts of supplication appear on numerous Roman coins, including some from the late Republic. A century or so ago, when Sir George Hill studied supplication on coins depicting surrender to Roman commanders, he drew an obvious conclusion about coins of this kind: they redounded to the credit of the Roman general who received the suppliant who was surrendering.¹ In recent years, Michael Crawford has implicitly acknowledged supplication in Roman Republican coinage.² Only

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1. Hill (1909: 98–100) regarding ANS 2002.46.492, a denarius to be discussed at length immediately below; see also Zehnacker (1973: 868) regarding the same coin.

2. Crawford (422.1b) describes the same coin in order to acknowledge the act of supplication noticed by Hill and Zehnacker. But Crawford does not include supplication in his indices and neither do *BMC*, Foss (1990), or the dictionary of Melville-Jones (1990).

two recent publications discuss the ritual, however. Both deal with one coin, a denarius issued in 58 BCE by the aediles M. Aurelius Scaurus, the son of the Princeps Senatus, and P. Plautius Hypsaeus. On the obverse, a figure that the legend identifies as Rex Aretas kneels after dismounting from a camel that stands beside him. In his right hand Aretas extends an olive branch. Above this scene Scaurus' name appears. To the left and right of the scene appear the words EX SC, showing that this coin was issued *ex senatus consulto*, perhaps on the occasion of the aedilician games that Scaurus conducted in the same year (Plate 3 no. 1). On the reverse (Plate 3 no. 2), Jupiter rides in a quadriga, thunderbolt in hand. A legend above the god and chariot reads P HYPSTAE AED CVR. To the right appear words that commemorate Hypsaeus' ancestor, C. Plautius, the consul who captured Privernum from the Volscians.³ The historical background for this coin is Pompey's eastern campaign, in which Scaurus fought against Aretas. Far from receiving Aretas as a suppliant, Scaurus made peace with him in 62 BCE on terms favorable to the king. Hypsaeus served Pompey in the East as well.⁴

In the first of the two articles about this coin, Andrew Wallace-Hadrill said that thanks to Jupiter's being in an unexpected place, that is, on the reverse, this coin was highly controversial. That the god was on the reverse, Wallace-Hadrill argued, "seems to symbolize disregard for the common values of the community", an assessment with which Barbara Levick, author of the second article, agreed. According to Levick, because Jupiter was on the reverse, Scaurus' and Hypsaeus' coin gave offense to values "previously embodied on obverse dies". Wallace-Hadrill also echoed Hill's observation that surrender by a suppliant on a coin redounded to the credit of the person to whom the suppliant surrendered or, in this case, the person to whom the suppliant might mistakenly be thought to have surrendered. But Wallace-Hadrill rephrased this point, stressing that the person to whom the suppliant supposedly surrendered, Scaurus, was the very person who had issued the coin. Scaurus, Wallace-Hadrill said, was "advertising" himself (1986: 74, n. 44). Levick, however, disagreed, and argued that the person to whom the suppliant surrendered might not be Scaurus but Scaurus' superior, Pompey. The credit would thus go to Pompey. By putting this scene on the coin, Scaurus was flattering Pompey (2001: 48, n. 41). Behind this exchange lies the work of Levick (1982) and some earlier controversy reported in Levick (2001: 41–43).

Supplication appears in the indices for *RIC* only in volume 2. The table of contents of Brilliant (1961) includes *submissio*, meaning supplication by defeated enemies. Schneider (1986: 22–31) also speaks of *Unterwerfungsgestus* and not gestures of supplicating or *Bittflehen* and *Schutzflehen*.

3. An obscure detail is a scorpion under the chariot on the reverse. A variant (Cr. 422.1a) lacks the scorpion.

4. Scaurus versus Aretas during the siege of Jerusalem: Josephus *Bellum Judaicum* 1.128. Peace with Aretas made via a legate and not by Scaurus in person: *ibid.* 1.159 and Josephus *Antiquitates Judaicae* 14.808.

This article will revisit the two concepts of controversial supplication and self-advertisement or flattery. The idea of controversial supplication will ultimately be rejected. A brief description of Roman supplication on coins and elsewhere will show that images of supplication do not offend community values. Instead they evince piety. Nor does the placement of Jupiter on the reverse offend community values. *Pace* Wallace-Hadrill, placing the god on this side of a coin is unremarkable. Self-advertisement or flattery will prove to merit modification. Supplication scenes on coins all give credit to the person receiving the surrender but not to the same degree. The difference in degree arises from the nature of the act of supplication. The role of the supplicandus is not a constant but varies according to the aspect of the act of supplication that the source chooses to report and to political factors.

Roman supplication has received less attention than its Greek counterpart,⁵ but C. Caecilius Metellus Pius acquired his very Roman cognomen by supplicating a tribune on behalf of his exiled father.⁶ As this example shows, Roman supplication does not occur only when a defeated (or supposedly defeated) enemy surrenders to the victor. Instead Roman supplication is a widespread practice with four steps found both in literary sources and on coins:

1. The suppliant approaches the person to whom he will make a request, the supplicandus, an approach that in the Roman Republic is always made in person rather than at an altar.
2. The suppliant identifies himself as such by using conventional gestures and sometimes words.
3. He states or otherwise makes known his request and often presents arguments in favor of granting it.
4. The supplicandus accepts or rejects the request, and if he accepts it, pledges that he will fulfill it.

The pledge is sacred and witnessed by Fides, Jupiter, and the other gods, and violated at the cost of divine punishment. For the purpose of this article, a brief

5. *Supplicatio*, or prayers of expiation or thanksgiving, is a different practice, and not relevant to supplication as this article defines it. *Supplicatio* on a coin is found in Cr. no. 348.5, a denarius issued by L. Rubrius Dossenus in 87 BCE, including the altar of Aesculapius to which prayers were addressed. Other short treatments of Roman supplication are Freyburger (1988) and (1992). Roman supplication and *deditio in fidem* are found in Hölkeskamp (2000). The standard treatment of Greek supplication, which influenced Freyburger, is Gould (1973).

6. Cicero's favorite case, occurring in 99 BCE, is *Post reditum in Senatu* 37, and, without supplicatory language, *Post reditum ad Populum* 6, 9, 11 and *Pro Plancio* 69–70. See also Dio Cassius 28.95.1, where Metellus Pius supplicates the public, not a tribune.

description of the first three steps will suffice. Attention will focus on the fourth, and last, step, the supplicandus making a pledge witnessed by Fides, the one which shows that representations of acts of supplication do not offend the “community values” that are of interest to Wallace-Hadrill and Levick.

The first step in an act of supplication is often easy: Metellus Pius approaches the tribune. Sometimes a whole city supplicates a victor and approaches from a distance, as occurs in both historiography (Aelian *Varia Historia* 3.26 preceded by Herodotus 1.26 and probably Polyaeus 6.50) and fiction (Heliodorus 9.11.4–5). But an individual can approach from a distance, too, as happens on the obverse of the Scaurus and Hypsaesus denarius of 58 BCE. Here Aretas has made a long journey by camel. Another camel-borne suppliant is “Bacchius Iudaeus,” the Eastern king who is surrendering to the Romans in Plate 3 no. 3 (the reverse of ANS 1987.26.112 = Cr. no. 431.1, a denarius issued by A. Plautius c. 55 BCE). The second step takes many forms, of which Aretas and Bacchius use two: they genuflect and hold a bough. It was more common to prostrate oneself, as Metellus Pius did, or to genuflect and extend hands, as depicted on an Augustan denarius that depicts supplication by a typical Armenian (Plate 3 no. 4, the reverse of ANS 1967.153.93 = RIC I² p. 62, no. 290, issued by P. Petronius Turpilianus in 18 BCE).⁷ The third step varies even more than the second. Metellus Pius requests that a tribune introduce a bill, but Aretas and Bacchius seek favorable surrender terms. Two coins, one Republican and one Imperial, present this step and also include an unspoken argument that the suppliant makes in favor of granting his request. On a denarius of Faustus Sulla (Plate 3 no. 5, the reverse of ANS 1944.100.2609 = Cr. no. 426.1, issued in 56 BCE), the issuer’s ancestor, the dictator, sits atop a throne in the center. On the left, a Mauretanian courtier, Bocchus, supplicates him, bough in hand, and on the right, the Mauretanian King, Jugurtha, sits in bonds. The unspoken argument is that Bocchus will trade Jugurtha’s freedom for his own. A supplicating Parthian on the reverse of a denarius of Augustus holds forth the Roman standards captured at Carrhae a generation before (Plate 3 no. 6, ANS 1944.100.38324 = RIC I² p. 64, no. 315, issued by M. Drusus in 18 BCE). Here the unspoken argument is that Parthia will trade the standards for its own survival.

Most of the three steps of an act of supplication include a religious feature. The bough, for example, is sacred, and genuflection and extended hands are characteristic of worship. One common request, asking for favorable surrender terms, takes the form of *editio in fidem*, or placing oneself in the trust, or *fides*, of the supplicandus, a feature that is religious because Fides is a Roman divinity. Livy and Caesar report numerous instances of suppliants who surrender according to *editio in fidem*: Livy 7.31.5, 8.20.6, and 37.27.6–28.7, where Greeks misunderstand

7. Another example of branch and genuflection is the reverse of RIC II p. 465, no. 952c (Hadrian).

the practice, and Caesar *De Bello Gallico* 1.27.8-28.2, 2.13.2-15.1, and 7.40.6.⁸ In one guise, that of Publica Fides, this goddess was worshipped in a temple close to that of the Capitoline Jupiter; Cicero notes that this honor was the express wish of Rome's ancestors (*De Officiis* 104). Supplementing Publica Fides is Fides Exercituum or the like, found only under the Principate. For these manifestations of Fides, worship of the goddess gives way to allusions to pledges binding soldiers to the deified emperor.⁹ All these elements, but especially the last one, anticipate the fourth, when the supplicandus who accepts the suppliant gives him a pledge. Now Fides and the other gods enter decisively. Often Fides manifests her presence through a gesture, the supplicandus' giving his right hand to the suppliant. In Pliny's words, the proffered right hand possesses *quaedam religio*, a "power to bind" (*Naturalis Historia* 11.251). In accordance with this power, Fides and the other gods present themselves as *testis atque arbitros conuentorum*. Giving the right hand and failing to keep one's word is perjury, a crime punished by the gods according to Livy 29.24.3 and Cicero *De Legibus* 2.115. This fear of divine punishment, in turn, provides a guarantee that the supplicandus will keep his word. The gesture of giving the right hand thus proves to be both solemn and complex. It establishes a tripartite relationship among the supplicandus, the suppliant, and the gods who witness the pledge that the supplicandus is making.

Not every coin shows the moment at which the supplicandus extends the right hand and gives his pledge. The denarius of 58 does not and neither does the denarius featuring Bocchius Iudaeus. But a denarius depicting supplication to the legate L. Staius Murcus (Plate 3 no. 7, the reverse of ANS 1978.214.1 = Cr. no. 510.1, dated to 42/1 BCE) shows the supplicandus raising a kneeling female figure with his right hand as he holds a sword in his left. An aureus of Hadrian (Plate 3 no. 8) shows the emperor extending his right hand to the supplicating Achaëa. In numerous other coins he does the same to other supplicating provinces, including Africa, Gaul, Spain, and Italy.¹⁰ Two other emperors, Aurelian and Valens, extend rights hands on similar coins.¹¹ Literary examples of giving the right hand to the suppliant are also numerous, including Curtius Rufus 6.7.35, Livy 30.11.17, Ovid *Metamorphoses* 6.494, and Silius Italicus 15.92. Sources that mention giving a hand to the suppliant but do not say which hand surely mean the right hand.

8. Supplication and *deditio* are not identical, however; for a comparable warning, see Freyberger (1988). For Fides as a divinity see Servius on Aeneid 3.07, Valerius Maximus 6.6. pr., and other passages discussed by Otto (1909: 2282-2283).

9. *Fides exercituum* begins with RIC I^p p. 213, no. 126d (Civil Wars) and II p. 67, no. 421 (Vespasian). A brief discussion of this and similar phrases, including *fides militum*: Otto (1909: 2284-2285).

10 The reverse of ANS 1944.100.45557 = RIC II p. 377, no. 321c, dated 134-38 CE. *Reparatio* instead of *restauratio*, as implied by the term (RESTITVTORI): RIC IX p. 150, no. 26a (Gratian).

11. An aureus of Aurelian in which the female suppliant represents the whole Roman East

These sources include Cicero *Pro Sestio* 58, Velleius Paterculus 2.80.4, Suetonius *Nero* 13.2, Tacitus *Annales* 12.19.1, and Valerius Maximus 5.1.8.

Religious gestures and devices, solemn pledges, and divine witnesses do not offend community values. Rather, they reaffirm the value of piety. Wallace-Hadrill's contention that the representation of an act of supplication could give offense is therefore groundless. In defense of this contention, we might suppose that Wallace-Hadrill would concede that images of supplication are inoffensive but would argue that the character of these images matters less than the side of the coin on which the image appears. Thus, an image of supplication on the obverse side compels any image of a god to appear on the reverse, an arrangement that dislodges the god from the more desirable of the coin's two sides. This is the reason that community values would be offended. But gods appear on the reverses of other coins, including a denarius issued by Plautius Hypsaeus in 60 BCE (Cr. no. 420). Plautius, in turn, borrowed this placement of the god from earlier coins such as quadrigati. The earliest of these coins (Plate 3 no. 9) dates from after the First Punic war. The god is Jupiter on a chariot, the same as in the denarius of 58.¹² Later came first-century denarii with numerous gods on the reverse.¹³ Under the Principate, Trajan revived the quadriga type (*RIC* II p. 305, no. 765).¹⁴

Moreover, the distinction between the two sides is not readily noticeable. Since the letters EX SC do not necessarily belong on one side or the other, only the flange indicates which side is which, and the flange, a production feature, would likely go unnoticed by a Roman handling the coin. Instead the Roman would notice the pairing of a god on one side and a social practice on the other, a pairing familiar from first- and second-century denarii showing a god on one side and voting on the other (Cr. no. 292.1, dated to 113/12 BCE, followed by Cr. no. 413, dated to 63 BCE). If the practice on one side is supplication and the god on the other side is Jupiter, such a comparison is especially easy—on one side is a practice involving the gods at the fourth step, when a pledge is given, and on the other side is Jupiter, associated with Fides. If the supplication occurs during a surrender, the comparison is even easier—on the one side is the surrender and on the other is the god of victory. The Roman handling the coin at the time it was issued might also refer to recent triumphs in which many suppliants marched as captives—not Aretas, to be sure, but other Eastern princes such as those brought to Rome by Pompey. *Parcere subiectis*: all parties know the theme. Even Aretas seems to know it. The only remarkable, although still inoffensive, feature of the coin is that the king of

appears in ANS 1990.64.1 = *RIC* 351. An aureus of Valerian in which the suppliant represents the Roman world appears in ANS 1944.100.27158 = *RIC* 50. These also are reverses.

12. The reverse of ANS 1978.64.287 = Cr. no. 28.3 is dated by Crawford to 225–212 BCE; the date given here is proposed by K. Harl. Similar quadrigati are Cr. no. 29.3, 30–34, 42.

13. Mars (Cr. no. 290.6), Minerva (Cr. no. 342.4), and Juno (Cr. no. 223).

14. Cf. Komnick (2001: 112, type 2).

the Arabs knows how to supplicate. Just as Rome's power reaches far, so does the sway of Rome's ritual. To that degree, Jupiter and the other gods involved in supplication, especially Fides, are the gods of the suppliant, too. The coin presents a Roman version of the *interpretatio graeca* of other religions.

Putting the god on the reverse, then, does not change the impression given by the depiction of Aretas' supplication. This placement happens to be conventional, and putting a practice like supplication on the other side is conventional, too. Interpreting the two sides in light of the other is easy, if not conventional, and reinforces the impression of piety and patriotism. If the two sides are considered separately, another possibility is that Jupiter in his chariot may be thought to accompany the ancestor of Hypsaesus who triumphed after capturing Privernum. Meanwhile, Aretas awaits the appearance of the supplicandus.¹⁵

Wallace-Hadrill's and Levick's other idea, that the issuer of the coin advertises himself or flatters his superior, is less novel than the idea about offensiveness. Both self-advertisement and flattery look back to the observation of Hill a century ago, the difference being that self-advertisement and flattery provide motives for Scaurus that Hill did not. Also, self-advertisement and flattery are more persuasive than is offensiveness. Scaurus might well wish to advertise (and misrepresent) his campaign against Aretas and he might well wish to flatter his former commander, especially in 58 when the Pompeian Aulus Gabinius had gained the consulship. He would also be aware that Pompey took credit for Scaurus' supposed victory in a tablet recording the dedication of eastern spoils to Minerva.¹⁶ But how much self-advertisement or flattery does a coin permit? The answer depends on the role of the supplicandus. The coins discussed in this article show how much this role varies and also how much any advertisement or flattery varies from one coin to the next.

In the aureus of Hadrian, the supplicandus dominates the image as it also does in the denarius of Murcus. Both supplicandi happen to be accepting the suppliant. But a coin not discussed so far, a nummus of Magnentius, shows that a supplicandus can dominate the image without accepting the suppliant. In Magnentius' coin (Plate 3 no. 10, the reverse of ANS 1984.146.2162 = *RIC* VIII p. 85, no. 115), the galloping emperor discovers a kneeling barbarian who shows that he wishes to supplicate by extending his hands and throwing away his arms, which lie below the horse.¹⁷ Will the emperor spare him? The scene does not say. Many precedents

15. Wallace-Hadrill (1986: 69–70) interprets the two sides in light of one another, although one of the anonymous referees for this article rightly cautions against doing so to the exclusion of considering each side separately.

16. Diodorus Siculus 40.4 and Appian *Bellum Mithridaticum* 117 with Pliny *Naturalis Historia* 7.97–8 for Minerva are all cited by Schneider (1986: 25) in his brief discussion of the denarius of 58.

17. Similar is *RIC* V.2 p. 104, no. 808 (Probus).

suggest that he will, including third-century coins on which barbarians supplicate successfully. But this coin limits itself to presenting the emperor's options: *clementia* or death.¹⁸ He is wielding his power either to accept or reject.

Impressive but less dominant is the supplicandus in the denarius of Faustus Sulla. He sits on a throne, listening and passing judgment. Also less dominant is Domitian who, on the reverse of a sestertius, stands beside a suppliant and undoubtedly listens (Plate 3 no. 11, ANS 1944.100.42573 = *RIC* II p. 187, no. 258, dated to 85 CE). Least impressive is a supplicandus who is missing from the scene but can be imagined acting as Domitian does—the supplicandus of the denarius of 58 or of the coin of Augustus.

The most glorification goes to the supplicandus in the role played by Magnentius or Hadrian, that is, the role of absolute ruler. Considerable glorification goes to the supplicandus essaying the role played by Murcus (military victor). Rather less goes to the supplicandus in the role played by Sulla on his throne (Roman magistrate). The least goes to the supplicandus who remains unseen, as on the denarius of 58. This is not to say that the missing supplicandus of the denarius of 58 is not being advertised or flattered. He surely is. But he is not receiving the fulsome treatment given to Magnentius or even Murcus. Far from ranking high, he ranks low.

The strength of the denarius of 58 lies in its ambiguity. Because the supplicandus is absent, it is possible for those handling the coin to differ about who the supplicandus is. Some Romans may have thought the supplicandus was Scaurus, as did Wallace-Hadrill, and others may have thought the supplicandus was Pompey, as did Levick. Pompey and Scaurus even might be imagined standing together, not a situation found on any coin, but reported in literature, notably in Virgil, where Anchises and Aeneas receive a suppliant who chooses to embrace Anchises (*Aeneid* 3.590–667).

The idea of self-advertisement or flattery remains persuasive but proves to be less persuasive than it would be had Wallace-Hadrill and Levick picked other coins. This conclusion suggests that we ask whether these scholars, who interested themselves in the Late Republic, might have found better evidence. The answer is a qualified no. The roles just described appear mostly in historical order. The highest-ranking role, the one essayed by Hadrian and Magnentius, appears last. Only emperors appear in this role. The first two emperors, Augustus and Tiberius, do

18. A telling literary precedent is Fronto *Epistulae ad Amicos* 2.16, where condemnation of Trajan's rejecting Parthamasiris attests to a tradition of acceptance. There are multiple visual precedents in the Column of Trajan, where successful supplication occurs in panels 33, 45, 54–55, 67–68, 75, 95, 99, 105 (panel numbers as in Settis 1988). In third-century coins, Probus holds a spear but does not threaten the four suppliants before him (*RIC* V.2 p. 32 no. 136), or holds a scepter, implying that he will rule over the four suppliants before him (p. 33 no. 143, p. 41 no. 224), and it is implied that he will rule over suppliants because of the inscription PACATOR ORBIS (p. 80 no. 591).

not appear in it, and this may be because they chose not to. The other high-ranking role, the one essayed by Murcus, happens to occur only in this coin, and so it confines itself to the very end of the Republic. The third role, the one essayed by Sulla, appears at a somewhat different time, in the late Republic. It also appears later, as shown by the sestertius of Domitian. The humblest role, the one found on the denarius of 58, occurs in the late Republic but also during the Principate, as shown by the Augustan coin representing the kneeling Parthian. Thus, selecting a role other than the lowest-ranking one need not have taken Wallace-Hadrill and Levick out of the Late Republic period, although they would have had to pick a coin like Sulla's or Domitian's. As for Murcus' coin, it does not truly belong to the Late Republic. It belongs to the last phase of the Civil Wars in which the Republic collapsed. For the most part, the roles that allow for the most self-advertisement or flattery belong to the Principate.

The reason for this feature in the supplication scenes on coins is not surprising: the emperor is both more powerful and less modest than earlier supplicandi. But we can also state the difference between the emperor and other supplicandi in terms of the four steps of the act of supplication. The emperor often appears at the fourth step, when the supplicandus accepts or rejects the suppliant. Hadrian, for example, accepts and Magnentius is about to accept or reject. Other supplicandi tend to appear at the third step, when the suppliant speaks and the supplicandus listens, for example, Sulla. Some supplicandi, like Pompey or Scaurus, do not appear at all. In the last instance, the coin depicts the first and second steps. However shown, the difference between the emperor and other supplicandi is historically determined. The Principate presents the supplicandus at the fourth step. Some phases of the Civil War present the supplicandus at the third step. Other periods of the Republic present him at the first and second step. The step depicted depends on the date of the coin.

Supplication on coins, then, has not only a cross-cultural, four-step structure but also a historical structure. As such, it is unique. Literary supplication in Latin sources reports all steps at all periods as does literary supplication in Greek sources, including Greek epigraphic sources.¹⁹ This is also true in Greek visual sources such as vase painting²⁰ and Roman bas relief sculpture with similar imagery, such as the Column of Trajan. The column's relief may show the

19. As at *Inscriptiones Graecae* II³ 276, 337, largely preserved inscriptions of the fourth century; the former is discussed in Naiden (2004: 63–67).

20. Step 2: a Carnelian gem of the first century BCE, Florence Museum of Archeology 14805 = *LIMC* 6.2 s.v. Medeia 16 (G. Berger-Doer), where Medea's children hold olive branches, a gesture missing from Euripides' and Seneca's plays. Step 3: a red-figure volute crater, c. 330 BCE, Munich Antikenslg. 3296 (J810) = *LIMC* *ibid.* 29 where Medea's children appeal for help while at the altar to which they have fled in fear of their mother. Step 4: a red-figure amphora, c. 330 BCE, Paris. Cab. Méd. 876 = *LIMC* *ibid.* 30, where Medea has just slain one child atop an altar, the presence of which designates supplication as well as

supplicandus in panel 54 (Settis 1988).²¹ The next panel (55 in Settis) may show the suppliants bowing down before the supplicandus (the second step). The suppliants commonly extend their hands towards the supplicandus' knees. The third step, request and argument, does not appear in the Column, but the treatment of the act of supplication is detailed and extensive with each step in a separate panel or part of a panel.²²

Supplication on coins would seem to differ for two reasons. One reason is physical. Images on coins are small and come in pairs, compelling the manufacturers of the coin to excerpt one or two steps out of four. Other media feature less severe excerption. The other reason is religious. A supplicandus resembles a god, a resemblance so familiar to the ancients that Pliny the Elder compared those who touch a man's knees, as a suppliant may, to worshippers at an altar (*Naturalis Historia* 11.103). Save during triumphs, annually elected magistrates or promagistrates should not resemble gods, and so, ancestors aside, the coins of the Republic do not show them acting as supplicandi before Murcus' coin of 43 BCE. Until that time, the supplicandus is an open secret and so moneyers must flatter or advertise him *in absentia*. But we can also rephrase this religious reason so as to give it political value. Before Murcus, it must be possible for a third party to fancy itself as the supplicandus—the Roman people as embodied in the goddess Roma. And the late Republican coins permit this alternative. The same ambiguity that makes it possible to envision either Scaurus or Pompey as the supplicandus also makes it possible to envision the Roman people in this role. If we ask why other media do not resort to this ambiguity and instead frankly portray magistrates as supplicandi, the answer is that these media (for example, literature) are not official. Official sculptural portrayals of magistrates as supplicandi do not date as far back as the Republic.

By offering something to Pompey, Scaurus, and the people, the denarius of 58 shows just how complex an image on a coin can be. The prosopographical and political factors noticed by Wallace-Hadrill and Levick contribute to this complexity, but they contribute less than do the religious scruples that determine both what is present and who is absent. In asking how the Romans responded to portrayals of supplication, we should remember these scruples and consider whether we have been asking the wrong questions. Rather than ask what mortals think, we should ask what the gods think.²³

sacrifice. All these examples concern Medea, but comparable groups might be cited for other mythic and dramatic figures.

21 This comparison is from Harl (1987: 33) and includes sculpture as well as bas reliefs.

22. Other visual comparanda can be found in Schneider (1986: 22–25).

23. A perspective informed by Linderski (1995) that focuses on the importance of the *pax deorum*. A contrary view can be found in Veyne (1988). A view contrary to Wallace-Hadrill's and Levick's can be found in Crawford (1983) behind which lies Jones (1956).

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THE MYTH OF DAPHNE ON A COIN MINTED AT DAMASCUS

PLATES 4–5

GABRIELA BIJOVSKY*

A Roman provincial coin struck at Damascus under Volusian depicts on the reverse an image that is best paralleled by depictions of the myth of Daphne, specifically representations of her metamorphosis. This third-century depiction is most closely paralleled by examples from Coptic art. The myth of Daphne is well known to have been connected with Antioch in Syria, but the paucity of literary evidence for Roman Damascus leaves us with no indication for why this scene should have been used there.

While working on a group of coins discovered in excavations at the aqueduct of Baniyas, a Roman provincial coin minted in Damascus (Coelē-Syria) drew my attention (Plate 4 no. 1).¹ The coin deserves special comment because of the scene depicted on its reverse. It is dated to the reign of Volusian and the type is also known under Philip Junior and Trebonianus Gallus.² The mint of Damascus is characterized by the variety of types produced, many of them still unidentified in terms of iconography and local cults. The coin under discussion is such an ex-

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1. IAA No. 64790, from excavations at the aqueduct and the Northern Cemetery at Baniyas, directed by Moshe Hartal, from the Israel Antiquities Authority.

2. The drawing of the coin in Plate 4 no. 1 was performed by Noga Zeavi (IAA). A similar but better preserved coin of Trebonianus Gallus is found in the American Numismatic Society Collection, New York (ANS 1944.100.83590, Plate 4 no. 2). My thanks to Sebastian Heath and Peter van Alfen from the ANS.

ample. The coin depicts a nude female standing facing, with open arms, bent at the elbows. She turns her head to the right and seems to emerge from an acanthus-like plant. She holds a vine(?) branch in each hand that stems from the plant.

The vine stalks at first suggest a Dionysiac connection. However, there is no specific figure or myth from the Dionysiac repertoire that refers to the female on the coin. The choice of the vine flanking the woman seems not to be intentional. The female-plant combination appears in Greek mythology connected to the story of Apollo and Daphne. The best literary source for this myth is Ovid's *Metamorphoses* (1.452–567) but there are several versions, including an Antiochene version (Pausanias 8.20.2; Libanius, *Or.* 2.R302; Philostratos, *Vita Apollon.* 1.16), which is most relevant to this discussion.

According to the Antiochene version, the nymph Daphne was the daughter of Gaia and the river god Ladon (from Arcadia or Syria). She was a wild virgin huntress who caught Apollo's attention. Daphne was pursued by him and at the moment of capture—in order to avoid ravishment—she prayed for help and was transformed into a laurel tree. Apollo declared the tree sacred, adopted it as his cultic plant, and made his wreath from its leaves. The scene takes place near a riverbank or by a spring. In the Antiochene version, the Syrians connected the myth to a certain grove beside a spring, nine kilometers southwest of Antioch. The legend further reports that king Seleucus I Nicator found Apollo's arrows inscribed with the god's name. The king called the place Daphne and ordered the erection of a temple to Apollo near the original laurel tree (Levi 1957: 212). The sanctuary had privileges of asylum (2 Macc. 4.33) and was surrounded by baths, gardens, and colonnades. The site, which was considered a suburb of the Syrian metropolis, became famous as a place of pilgrimage and scene of a festival of vice and games (Polybius, *Histories* 31.3). Due to its celebrity, the city of Antioch was frequently called Antioch-near-Daphne (Strabo, *Geography* 16.2.6).³

Incidentally, an ancient settlement south of Antioch—modern Harbiye—with remains from the Late Hellenistic period to the sixth century CE (residential villas, aqueducts, a theater, etc.) was discovered and identified as Daphne, during the excavations at Antioch in 1933 to 1936 (Stillwell 1938: 49–148, 49 n.1).

3. Strabo writes: "Seleucis is not only the best of the above-mentioned portions of Syria, but also is called, and is, a Tetrapolis, owing to the outstanding cities in it, for it has several. But the largest are four: Antiocheia near Daphne, Seleuceia in Pieria, and also Apameia and Laodiceia . . . Lying above Antiocheia, at a distance of forty stadia, is Daphne, a settlement of moderate size; and also a large, thickly-shaded grove intersected by fountain-streams, in the midst of which there is an asylum-precinct and a temple of Apollo and Artemis. Here is the custom for the Antiocheians and the neighbouring peoples to hold a general festival."

The name Antioch-near-Daphne appears also as the reverse inscription on a series of bronze coins, struck by the Seleucid king Antiochus IV Epiphanes after 169/168 BCE: ANTIOXEΩN TΩN ΠΡΟΣ ΔΑΦΝΗΙ (*SNG Israel* 1: 144, nos. 1008–1015).

In fact, a very rare coin depicting Daphne transforming into a tree, minted in Antioch, was published in 1997 (Plate 4 no. 3; McAlee 1997: 30–31).⁴ The coin belongs to the pseudoautonomous series and is dated to 145/146 CE. The type is quite similar to our coin, with few differences: Daphne springs clothed from the trunk of a laurel tree. It seems quite obvious that both coins belong to the same iconographic tradition, as will be shown below.

Despite that the Antiochene version shows that the myth of Daphne's metamorphosis was well known in Syria, there is apparently no direct connection between this story and the city of Damascus. No reference or archaeological evidence was found to a cult of Apollo and Daphne. According to Strabo, the city was "the most famous of the cities in that part of the world in the time of the Persian empire" (*Geography* 16.2.20). However, it lost its position as the capital of Syria when Antioch was founded by Seleucus I. In 111 BCE the Syrian kingdom was divided, and Antiochus IX Cyzicenus became king of Coelē-Syria and Damascus the capital. Its political and commercial importance was eclipsed by Antioch and only scanty notices about Damascus occur in classical authors. Unfortunately, we may never learn the circumstances under which our coin was struck. Yet the following iconographical analysis corroborates its unknown identification.

The representations of Apollo and Daphne in ancient art have been studied comprehensively (Müller 1929: 59–86; Levi 1957: 211–214; *LIMC* III 1–2: 345–348). They can be divided into two main groups: the pursuit scene showing Apollo and Daphne, sometimes with additional figures, and the figure of Daphne alone at the moment of the metamorphosis. Daphne may be naked or partially covered by a himation. As the personification of the laurel tree, she may hold branches in her hands or they may grow from her head, arms, or legs. In the pursuit scene group she is usually shown fallen to her knees with her head turning back and embracing a tree.

The only known representation from ancient numismatics before the publication of the coin from Antioch is a pursuit scene composition. The coin was minted under Commodus (177–192 CE) and was struck in Apollonia ad Rhyndacum in Mysia (Plate 4 no. 4; *SNG von Aulock*: no. 7202). The scene shows Apollo advancing toward Daphne. She is fleeing half draped, falling to her knees, desperately grasping the trunk of a tree while her head is turned to look back at Apollo. The coins from Antioch and Damascus should then be representations of the second iconographic group. It is possible that the type on the coin from Damascus was made following the earlier Antiochene issue. Since this assumption is based on a very rare coin, the question of whether an influence existed remains open.

4. This very rare coin was published after the writing of this article. The finding of such a similar type in Antioch only confirms our suggestion for the identification of the figure on the coin from Damascus. McAlee's opinion (1997: 30–31) is that this coin was an experimental issue, never repeated in Antioch.

A similar motif—a woman emerging from the branches of a tree—is represented on a coin of Myra in Lycia minted under Gordian III (*BMC Lycia*: liv, 71 no. 11). However, on this coin the tree is flanked by two serpents and is attacked by two men with double axes, indicating that the scene should not be related to the myth of Apollo and Daphne but to a different story. Some scholars suggest that this coin illustrates the myth of the birth of Adonis by Myrrha, who was turned into a myrrh tree by the gods (Ovid *Metam.* 10.471 ff.; Cook 1925: 680–682, fig. 620; Ustinova 1999: 102, n. 77).

There is no conformity in depictions of the myth in Roman art. The story of Apollo and Daphne became very popular and it is often portrayed in mosaics, sculptures, and minor arts such as gems and glass. The metamorphosis itself seems to be the most interesting issue for the artists as it represents the culminating moment of the drama. As D. Levi points out, the image of Daphne standing in frontal view is the most suitable for this representation: it can be depicted alone or in a scene composition with other figures (Levi 1957: 213). The standing Daphne emerging from a plant and clasping branches became a motif pattern with traces in Roman art from the first century CE, for example, the Augustan marble statue Daphne Borghese from the Ny-Carlsberg Glyptothek of Copenhagen that represents her as a tree from the hips down (Müller 1929: plate 11).⁵

A bronze mirror from the Kerameikos (Tomb Q03) from c. 150 CE shows Daphne, half-naked, in full back view with branches growing from her open arms and around her feet. She is looking at Apollo, who approaches her holding a branch in his hand. To her left is a small figure (local personification?) sitting on a rock, clasping a branch (*LIMC* III 1-2: 347 no. 38). Her posture, which is very peculiar due to the back view, closely resembles the Damascus coin.

5. Moreover, the motif of the female figure wearing a calathus, emerging from acanthus leaves and clutching stems of two coiled tendrils into which her limbs are combined (tendrill-limbed or anguipede), is recognized as the ancient “Great Goddess” of Asia Minor, Northern Greece, and South Russia (Bosporus). The Scythian iconographic tradition of this goddess (so-called Argimpasa-Aphrodite Ourania) has been studied comprehensively by Ustinova (1999: 27–174). I am indebted to A. Roshwalb Hurowitz, who drew my attention to this interesting study.

Secondly, waist-high or knee-high figures emerging from foliage or whorls, sometimes clutching stems, are a central device in the “peopled scrolls” motif representations. There, they mostly appear as simple decorative motifs without any iconographic significance. This fashion was quite popular in imperial times in the eastern provinces. For further discussion on this topic, see Toynbee and Ward-Perkins (1950), especially regarding the eastern provinces (Toynbee and Ward-Perkins 1950: 30–37). Some of the works of art cited by those authors quite resemble the design in our coin from Damascus: a frieze at Aquino from the first century BCE to first century CE (Toynbee and Ward-Perkins 1950: plate II, 3), a frieze on the Palatine hill in Rome from the third to fourth centuries CE (Toynbee and Ward-Perkins 1950: Pl. X, 2), and a frieze from the gymnasium at Aphrodisias from the third century CE (Toynbee and Ward-Perkins 1950: plate XXIII).

Besides the coin struck at Antioch cited above, Daphne appears with the lower part of her body depicted as a tree in two other examples of Antiochene provenance. One is a carnelian gem of the second century CE in the Landeshauptstadt Hannover Kestner Museum (inv. no. K518), showing Tyche, the city goddess, sitting in the center and Orontes, the river god, at her feet (Plate 5 no. 5). To her right Apollo is holding a branch; to her left is an olive tree from which emerges the half figure of Daphne, facing and draped, with open arms bent at the elbows and sprigs sprouting from her hands (Schlüter et al. 1975: 282 no. 1533).⁶ The depiction on this gemstone is very similar to that on the coin from Antioch, probably indicating the same iconographic source. The second example is a painted glass vase from South Russia, possibly imported from Antioch, dated c. 200 CE, exhibited at the Museum of Glass in New York (No. 55.1.86). Apollo and Daphne appear together with Pothos and Ladon. All the names are inscribed. Daphne is facing and naked, the lower part of her body transformed into a thin-trunked tree. Apollo runs after her, holding a laurel branch, followed by the winged Pothos while Ladon sits on a tree trunk (Müller 1929: 63, Abb. 5, plates 12 and 13; Levi 1957: 213).

The myth of Apollo and Daphne is also the subject of two mosaics found in Antioch in the House of Menander, room 16, from the third to fourth centuries (Levi 1957: plate XLVII, a-b), and a mosaic floor from the villa at Daphne 23/24-M/N, room 3 (Stillwell 1938: plate 36 no. 48). However, both mosaics resemble the iconographic pattern of the pursuit scene described in the coin from Mysia and are not connected to the motif pattern described in the coin from Damascus.

Surprisingly, the closest stylistic and iconographic parallels to the coin are found in Coptic art. Although the period is much later—the fifth and sixth centuries—the similarities are striking and cannot be ignored. Two examples represent the metamorphosis: a limestone relief found at Ahnas in the Cairo Coptic Museum (no. 7061) showing Daphne nude and facing, arms open and elbows bent, standing between two branches that she clasps with her hands (Plate 5 no. 6). The lower part of the relief is broken, but it seems that the figure emerges from the base where the two branches joined (Kakovkine 1992: 352 no. 4). The second one is the shawl of Sabina from Antinoe at the Musée Guimet. Daphne stands nude in the same pose but she extends her hand to Apollo with the sign of the reversed ankh (Kakovkine 1992: 352 no. 2; Levi 1957: 213).

Some conclusions can be drawn from this discussion:

1. The representations of the myth can be divided into two major iconographic groups: the pursuit scene and the metamorphosis of Daphne alone. Both groups coexisted as can be seen from the coins (Mysia, Antioch, and Damascus) and were used in all artistic media from the first to the sixth centuries CE.

6. My thanks to Dr. Anne Viola Siebert, Curator at the Landeshauptstadt Hannover Kestner Museum, who cordially sent me a photograph and references for this gemstone.

2. The metamorphosis of Daphne is slowly reduced to a concise motif pattern. Daphne is usually depicted nude, frontal, with arms open and elbows bent, emerging from a tree. The degree of transformation is not constant—sometimes the torso of the figure appears on top of the tree and sometimes the figure is complete except for the lower part of the legs or the feet.
3. The type of tree does not seem to be significant. Although the literary sources specify a laurel tree, artistic representations include olive trees, vines, and laurel trees. In most cases, however, the plant's type is unidentifiable.
4. It is difficult to explain the close similarities between the representation on the coin minted in Damascus and those in Coptic art, mainly because, as we have seen in the Antioch mosaics, there were other iconographic traditions in existence. However, it is possible that during the third century the motif pattern that appears on the coin was accepted as the preferred prototype for the depiction of Daphne that developed later in the Byzantine period.
5. There seems to be no direct connection between the legend of Apollo and Daphne and the city of Damascus. However, the popularity of this myth in Syria and the existence of the same type from the mint of Antioch might explain the choice of the type.

ACKNOWLEDGMENTS

I am indebted to Mr. M. Markowitz of Fairfax, Virginia, USA, who raised the possibility that the image on the coin might be a representation of the metamorphosis of Daphne. My thanks to Ann Roshwalb Hurowitz (IAA) for the English editing.

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EVIDENCE OF THE COINAGE OF POEMENIUS' REVOLT AT TRIER

PLATE 6

WALTER C. HOLT*

In August 353 Constantius II recaptured the western areas of the empire and the usurpers Magnentius Augustus and Decentius Caesar met their respective ends. The events in the weeks and months prior to their deaths included a revolt against the usurpers at the city of Trier. This paper seeks to establish a firmer date for both the revolt itself and the coins that relate to it. A probable timeline of events is determined through an examination of the coins and by comparison of their weights and diameters.

After him Poemenius . . . was haled to execution and perished; he was the man . . . who was chosen to protect his fellow-citizens when Trier closed its gates against Decentius Caesar (Amm. Marc. 15.6.4).

A small group of coins from the mint of Trier and a single line in Ammianus Marcellinus are all that remain of a fascinating event in Roman history—the remarkable instance of a usurper being usurped.

These events have been addressed previously by J. P. C. Kent (1959: 105f); however, a few matters are in need of re-examination. We do not have an exact date for these events, and it is therefore important to attempt to establish the approximate date of the revolt of Poemenius and with it that of the associated

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coinage. It is also important to establish whether or not the city was subsequently retaken by Decentius and whether any coinage was struck from that time until the fall of the usurpers and the city's recapture by Constantius II.

BACKGROUND

The summer of AD 353 saw the western regions of the Roman empire, those of Gaul, Britain, Spain, and some of the nearby areas of Germany and the Alps, under the rapidly deteriorating control of the usurper Magnentius. He had taken over these areas from Constans, the youngest son of Constantine I, in a murderous coup in 350. Over the next three years Constantius II, the last surviving son of Constantine I, battled against the usurper with varying success, and by the middle of 353 he had positioned himself toward a decisive encounter in southern Gaul.

The city of Trier was significant during the last days of this usurpation. Decentius Caesar, brother of Magnentius, had based himself at Trier and, in mid 353, was forced to deal with a series of incursions by local Germanic tribes. These incursions were most likely directly influenced by the agents of Constantius and significantly advantaged his situation.

Trier was the center for imperial administration in the West and it is not unlikely that Decentius based himself there for that reason. It was also a place from where he could coordinate his defenses against the ongoing Germanic raids along the Rhine frontier. Decentius was absent from or had cause to depart the city, perhaps to deal with one such incursion, and upon his return found that the city, under the leadership of Poemenius, had closed its gates to the junior usurper.

Decentius and his entourage, now forced to seek refuge elsewhere, headed west toward familiar territory around his birth city of Ambianum (Amiens) and Lutetia (Paris). Almost immediately the Trier mint, under Poemenius, began striking coinage in the name of Constantius II, but more importantly it ceased striking coins for Magnentius and Decentius.

Magnentius was attacked by Constantius at Mons Seleucus (La Batie-Montsaléon) in late July 353, cut off from his troops, and forced to flee to Lugdunum (Lyons). There he was besieged by the pursuing forces of Constantius and later, on 11 August 353, put his family to death and took his own life. One week later Decentius, now at Agedincum (Sens), received news of the fate of his family and brother and hanged himself.

THE COINS: CHI-RHO COINAGE

In Kent's discussion on the chronology of the Trier coin issues he determined that there were two issues—one in gold and one in bronze—that clearly related to the period of the revolt at that city. They were both in the name of Constantius II and Kent dated them to the latter period of Magnentius' reign (Kent 1959: 106).

The very rare gold issue has the reverse legend VICTORIA AVG NOSTRI and shows Victory with her wings spread and holding a spear and palm, leading a figure of Constantius in imperial robes and holding a globe and spear. There appears to be no prototype for this depiction, and the only apparent precedent for this legend is a large gold medallion multiple solidus from the Aquileia mint in the name of Constans with the reverse legend VICTORIA AVGVSTI NOSTRI (*RIC VIII Aquileia* 35). Although this medallion was struck in the name of Constans, between 340 and 350, the issue as a whole includes pieces in the names of both Constans and Constantius and there may yet be the discovery of a similar piece for Constantius.

Of significance is the fact that reverse legends in the form . . . AVG NOSTRI are peculiar to both the reign of Magnentius and the mint of Trier. Variations had appeared under earlier reigns, but legends with this exact form are confined to this limited time and place.¹ The gold and bronze issues in the name of Constantius share this feature, which gives us a strong indication as to the time and place of their production.

The bronze issue in the name of Constantius continues the remarkable reverse type, introduced by Magnentius, of the large chi-rho symbol, or christogram, flanked by the Alpha and Omega. This type was initially struck in the names of both Magnentius and Decentius at several mints—Ambianum, Lugdunum, Arles, and Trier—but the absence of the type at either Aquileia or Rome suggests that they date from a time after the usurper's loss of these territories and thus to after mid 352. For this completely new reverse type Bastien indicates a date closer to *en fin* 352, *ou plutôt au début de* 353 ("the end of 352, or more probably early in 353") in his seventh phase (1964: 24, 69ff).²

The issues of this reverse type in the name of Constantius were only produced by the Trier mint and differ not only in name but also in reverse legend. It changes from SALVS DD NN AVG ET CAES for those of Magnentius and Decentius to SALVS AVG NOSTRI for Constantius. This is a distinct change in legend from "the welfare of our lords (plural) Augustus and Caesar" to "the welfare of our (singular) Augustus". Even without the overt change of name on the obverse it is clear that the reverse legend of this extraordinary type identifies a change in the recognized ruler by the city of Trier. As Decentius outlived his brother (Caesar rather than Augustus) it is certain that the change in reference from the plural to the singular is

1. Two more Trier mint emissions of Magnentius relate, both in silver and both very rare, one with the reverse legend VIRTVS AVG NOSTRI (*RIC VIII Trier* 257; reverse type: emperor holding globe, before him a captive with hands raised), and the other with AEQVITAS AVG NOSTRI (*RIC VIII Trier* 300; reverse type: Aequitas holding scales and cornucopiae).

2. Kent and Bastien are ultimately in agreement that this is the final issue of Magnentius at Trier (and his other mints).

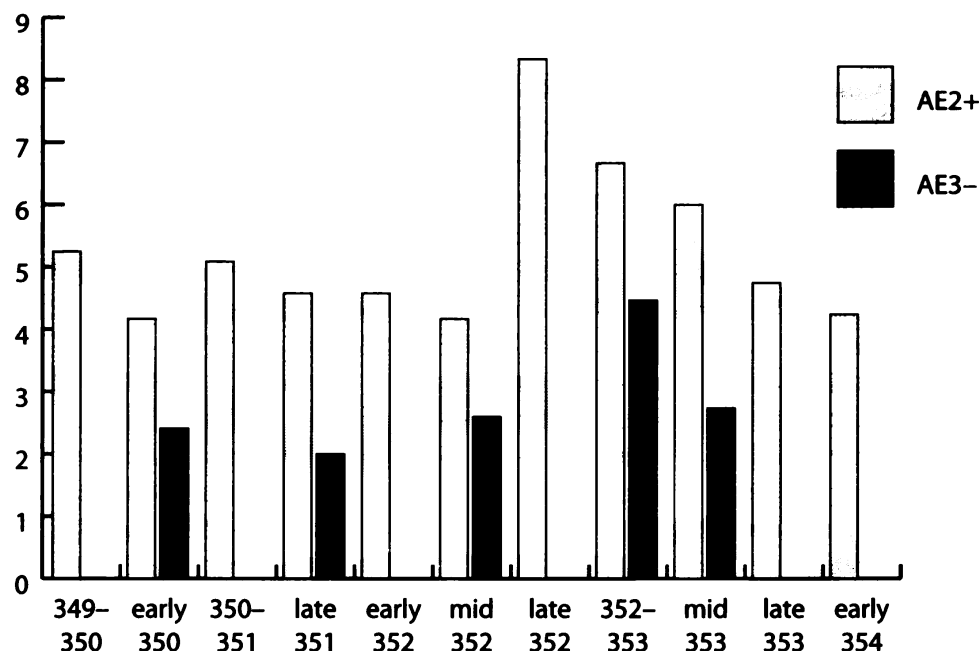


FIGURE 1. Average weight in grams of issues from the Trier mint. The numbers in this chart are from Kent (1981), all western mints, following Kent's chronology. This information is generally supported by reference to hoard reports, sale and auction catalogues, and public and private collections. Exceptions are infrequently encountered, though they may reasonably be expected.

from the usurpers to Constantius. We may thus rely on either side of these bronze coins for evidence of the city's transfer of allegiance.

In addition, there is a change in the average weights of these bronze pieces, from a peak of about 8.33 grams for the issues of Magnentius (declining quickly to about 6.67 grams) down to about 6.00 grams for those of Constantius (Kent 1981; Bastien 1964).³ There is also a smaller half-unit of similar description that varies from about 4.46 grams under the usurpers to about 2.75 grams in the name of Constantius. The pieces of Magnentius have on average a weight that is greater than those of Constantius. This serves to indicate that the issues of Constantius

3. It should also be noted here that the bronze coinage of this period is fiduciary in nature, relying on public confidence in accepted standards rather than any actual or commercial bullion value, size, or weight. The Chi-Rho coinage lacks the silver coating which may be observed on better preserved specimens of the coinages of some of the earlier issues and in previous decades. Any silver present in these planchets appears by all accounts to be incidental and may correctly be considered an impurity.

were issued after those of Magnentius and, further, that no Magnentian pieces were issued afterwards (Fig. 1).⁴

The initial issues of Magnentius weigh an average of between 5.26 grams and 5.07 grams, the next decline from 4.59 to 4.21 grams, and the first issues of Constantius and Gallus, following the recapture of the city, weigh between 4.75 and 4.25 grams. The pattern of weights and decline in weights has a relative constancy common to all regular (i.e., non-Chi-Rho) issues, and is a pattern into which the Chi-Rho issues do not belong. If one examines the bronze and billon coinage from those western mints controlled by Magnentius, both as a whole and on a type-by-type basis, it may be seen that the large Chi-Rho types (of both Magnentius and Constantius) are exceptional.

Magnentius' regular bronze coinage includes types with the following reverse legends: FEL TEMP REPARATIO, FELICITAS REI PVBLICE, GLORIA ROMANORVM, and VICTORIAE DD NN AVG ET CAES. It consists, from all western mints, of two denominations, one weighing around 4.5 grams (between about 5.26 and 4.21 grams), with a diameter of about 22 to 23 millimeters, and commonly referred to as *centenionalis*, *maiorina*, or $\text{Æ}2$, and the other weighing around 2.3 grams (between about 2.42 and 2.00 grams), with a diameter of about 18 to 20 millimeters, and referred to as *half-centenionalis* or $\text{Æ}3$.

The two Chi-Rho types, SALVS DD NN AVG ET CAES and SALVS AVG NOSTRI, however, apparently consist of three (at 8.33, 6.67, and 4.60 grams) and two (at 6.00 and 2.75 grams) denominations respectively.⁵ The question therefore arises as to what the denominations of these pieces may be.

By weight the smallest of the Magnentian issues, at 4.60 grams, should be a "*centenionalis*," etc. But at 2.75 grams the equivalent smallest Constantian issue should be a "*half-centenionalis*." These should be the same denomination and in fact are (at $\text{Æ}3$), but their disparate weights confuse the matter. Their mean diameter is perhaps of more significance, and here each of these is similar though with a slight, and not unexpected, decline: 20 to 21 millimeters (Magnentius) and 18 to 20 millimeters (Constantius). The situation is similar with the pieces of the next largest diameter (the $\text{Æ}2$) at 23 to 25 millimeters (Magnentius) and 22 to 23 millimeters (Constantius). The outstanding piece of Magnentius is an oddity in both weight and diameter (at 27 to 28 millimeters) and may be referred to as a "*large $\text{Æ}2$* " to distinguish it from the " *$\text{Æ}2$* ".

4. Bastien disagrees with the date of introduction of the issues in the name of Decentius, but the accepted order of issues appears the same and the weights observed are similar (Appendix 2).

5. Following the figures in Kent (1981), although the earlier figures in Bastien (1964: 169f.) indicate weights of 8.22, 6.73, and 3.96 grams for the three Magnentian issues respectively.

Upon further examination, it becomes clear that the large Chi-Rho types ($\mathcal{A}2$) of Magnentius are too heavy to be properly equated to the regular issue “centenionalis” or “maiorina” denomination with which they are consistently associated, and they are too light to be a “double” of those denominations. Similarly within the Chi-Rho issue, the $\mathcal{A}2$ is too light to be a double of the $\mathcal{A}3$. If we follow the example of earlier Roman issues (such as the antoninianus, or double denarius, introduced by Caracalla at just one and a half times the weight of the denarius), in which a double denomination is rarely actually double in weight, then it is probable that the $\mathcal{A}2$ was in fact double the denomination of both of the Chi-Rho $\mathcal{A}3$ and the regular centenionalis issues. The Constantian issues are lighter but similarly denominated.⁶

This still leaves the anomaly of the large $\mathcal{A}2$ within the Chi-Rho series. It is apparent that the large $\mathcal{A}2$ was the first of the Magnentian Chi-Rho issues. One can imagine the initial impact a new, larger and heavier issue may have had on the local populace, and the statements made and interpreted at that time by them. It may initially have been produced to be close to double the weight of the regular issue centenionalis, but it was soon reduced to the lower weight and smaller diameter, probably for inflationary or economic reasons, while retaining its denominational value.⁷ This pattern of high initial weight and subsequent reduction is also observable at mints other than Trier, and the rapidity of such reduction may thus

6. The regular coinage of Magnentius was generally silvered (coated or “washed” with silver) and contained a small percentage of silver (about 1% to 2%), whereas the Chi-Rho coinage had neither of these features (Kent 1981: 63 table; supported by Bastien 1983b: 273f). It remains possible that the regular maiorina issues, with their small silver content, could have held approximately the same denominational value as those Chi-Rho $\mathcal{A}2$ issues without. The greater diameter coupled with the extra weight of base metal added to the new coinage may have been designed to compensate for this removal of silver. This is, nevertheless, a completely new issue of coinage and we may never fully understand the relationship—if there is any—between these two distinct issues, with one factor (weight/silver content) not necessarily being dependent on the other (diameter). With respect to this particular aspect of Magnentian coinage it may be best at this time simply to accept that there were two distinct coinages, as proposed by Bastien in differentiating his seventh phase from phases one through six, and consider the broader question of the relationship between issues elsewhere.

7. Bastien (1964: 24) submits a shortage of metal as the reason for the rapid weight and size reduction of both the bronze and gold issues. I do not intend to address here the reasons behind this rapid decline in weights but will simply observe that such a decline existed. The evidence for this change is readily observable and has been well noted by both Kent (1981) and Bastien (1964). Declines such as this have been noted in other instances and are generally explained by a combination of concurrent factors, the most obvious being a requirement to make significantly large payments while experiencing a shortage in coinable metals.

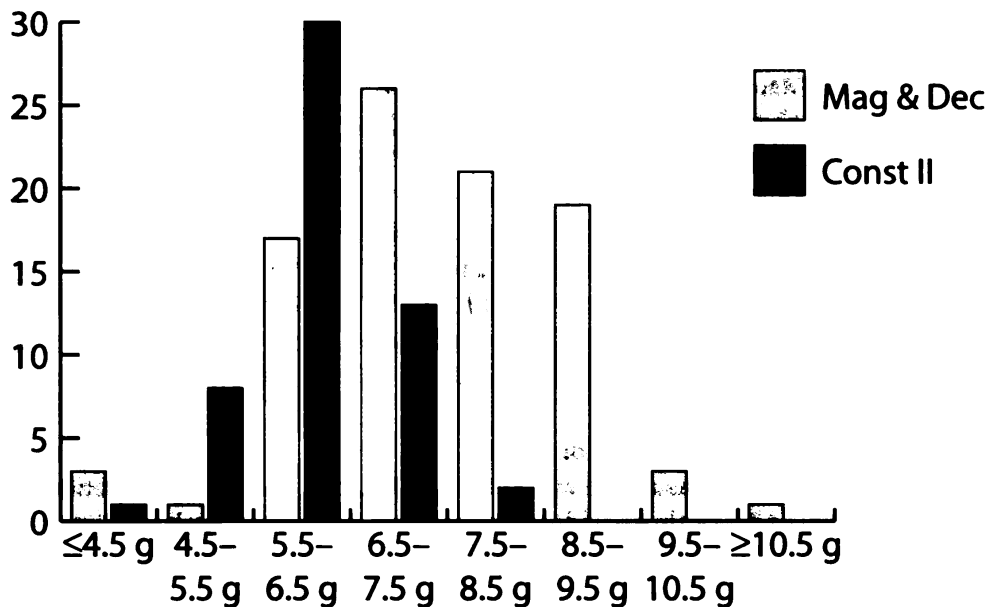


FIGURE 2. Chi-Rho issues from the Trier mint. Specific sources for the weights of the approximately 160 coins referred to are outlined in Appendix 1.

sufficiently explain the scarcity of these largest issues. They are therefore the same denomination as the slightly smaller $\mathcal{A}2$, simply earlier products. A comprehensive die study may better confirm this determination (Fig. 2).⁸

DATING THE CONSTANTIVS CHI-RHO ISSUE

Had the Chi-Rho issue been a product of Constantius at the mints under his control, then it would be expected that all or some of those other mints would also have produced coins with this reverse. They did not. Even though the weight of about 6 grams for the Constantius Chi-Rho issues is greater than the first of the FEL TEMP REPARATIO issues of Constans struck before 348 to 350 (5.26 grams), there can be no suggestion that the Chi-Rho pieces were struck before this date.

None of these Chi-Rho issues are in the name of Constantius Gallus, as there are of the joint FEL TEMP REPARATIO issues struck from the last third of 353; thus, they cannot be dated either to this time or afterwards. This marked change in the types at Trier, back to the FEL TEMP REPARATIO (fallen horseman) issues and

8. Specific sources for weights of coins referred to in this chart (approximately 160 pieces considered) are outlined in Appendix 1.

conforming to those issued at his other mints, is further evidence that the Chi-Rho type must have been issued before Constantius' recapture of the city.

As Bastien states, the Chi-Rho coinage shown between the Alpha and the Omega is more akin to orthodox Christian symbolism than to Arianism and was at variance with Constantius' position (Bastien 1964: 24, 69).⁹ Its introduction relates to both the political and the religious tensions present between these two adversaries and their respective areas of government. Not only would Constantius not have produced this coinage himself, he would not have permitted its continuation. It is apparent, therefore, that the Chi-Rho coinage must have been produced before the arrival of Constantius (or his representatives) at Trier, giving a *terminus ante quem* concordant with the fall of the usurpers and the recapture of Trier—that is, late August of 353.

Subsequent to these events Constantius was keen to display a distance from the types struck by the usurpers and their propaganda, and the production of coins that differed from those of his other mints was immediately terminated. In fact, it is believed that Constantius specifically demonetized the Magnentian pieces sometime in early 354 in an attempt to remove them from circulation (Kent 1981: 64f; Harl 1996: 170–171, 431 n. 31; *Codex Theodosianus* 9.23.1). The change of reverse type would certainly have assisted in differentiating between the old “bad” money and the new “good”.

The assertion by Kent (1981: 136) that the weights of these pieces indicate they ought to be placed between the second and third stages of Magnentius' coinage¹⁰ is seemingly contradicted by two statements. Of Trier he says in his earlier study that “its revolt cannot therefore have taken place until shortly before the final campaign of Constantius against Magnentius in the Summer of 353” (Kent 1959: 106), while elsewhere in *RIC VIII* he says of the coins that “for the average weight of the bronzes would place them somewhere in the middle of the Salus coinage, and there seem to be Magnentian solidi of Trier later than any of the bronzes” (Kent 1981: 43).¹¹ Kent ties the coins to the revolt, which makes it difficult to see how coins can predate a revolt. Another explanation must exist.

Kent compares all of the types of coinage from all mints together as if they were one continuous, though declining, group of emissions. It becomes apparent that the Chi-Rho issues are significantly different and should be viewed separately from all other issues. The earlier issues appear to follow a standard pattern as

9. This is further discussed in Bastien (1983b: 270f). This imagery may have more political than religious significance. It has also been suggested that it is more pro-orthodox than anti-arian.

10. There may be some confusion because he uses the word “stage” here but “group” and “series” in the catalogue proper.

11. It is probably a failing on my part, but I find myself unable to establish which of the Magnentian issues Kent refers to here.

Table 1. Proposed chronology of Chi-Rho coinages

Period of issue (353)	Unit Diameter/ Weight	Half-Unit Diameter/Weight	Note
January–February?	27–28 mm 8.33 g (8.22 g)	*	Magnentius' initial issue
February?–June/July	23–25 mm 6.67 g (6.73 g)	20–21 mm 4.60 g (3.96 g)	Magnentius' re- duced issue
June/July–August	22–23 mm 6.00 g (5.97 g)	18–20 mm 2.75 g	Poemenius' revolt issue

I have followed Bastien's phase seven chronology for Magnentius' Chi-Rho coinage (353). The months indicated are broadly approximate and are of my own reckoning. The weights shown are from Kent (1981) with those from Bastien in brackets.

outlined in Bastien, and he, indeed, separates these issues and states that the Chi-Rho coinage supersedes the *pecunia maiorina* (Bastien 1964: 69).¹² We must look within this period of issue to determine where the revolt and its coinage should be placed.

In suggesting that the Constantian pieces were struck at the beginning of the Chi-Rho series, Kent (1981: 136) goes on to say "we are free to consider the possibility that Decentius in fact retook the city."¹³ This cannot be. It is apparent that Poemenius successfully held Trier against Decentius until the end of the revolt. Poemenius was certainly still alive two years later, since he was executed after the Silvanus revolt in 355 (Amm. Marc. 15.6.4). It is quite certain that had the city been retaken by Decentius, Poemenius would have shared the fate of most vanquished rebels and lost his life.

Alternatives must be considered, however, for example that Decentius was able to retake the city and that Poemenius fled to safety to wait out the end of the usurpation—but neither the numismatic nor the historical evidence supports this supposition. If Decentius had taken back the city, why did he not remain there? If not this revolt, then what was it that caused Decentius to flee to Agedincum and then Ambianum?

There are no issues in the name of Magnentius or Decentius of a weight or diameter that would definitely place them as being issued after the revolt but before the recapture of the city by Constantius. The weights of the Magnentian issue decline and cease, whereupon the Constantian issues begin and then continue to

12. We ought to follow the pattern of emissions as indicated by Bastien, in that there are a series of declining issues and then the Chi-Rho coinage with none of the earlier bronze coinages issued concurrently or subsequently. A clear termination of one group is demonstrated, followed by the introduction of another.

13. Although elsewhere (Kent 1981: 12) he indicates that "it is doubtful if it (the city of Trier) was ever retaken by the usurpers."

decline and ultimately cease. There is no recurrence of the type in the name of Magnentius that shows a decline in weight equivalent with the Constantian issues, nor are there any reduced beyond those issues. The situation is similar with the diameters of these pieces, though the recorded evidence is less complete.

There is a correlation between Magnentius' Chi-Rho issues of Trier and those of his other remaining mints. This common production pattern across mints suggests that his Chi-Rho issues of Trier were not interrupted by the revolt coinage but that the revolt coinage was struck either before or after the Magnentian series. We therefore have to question whether they should be placed at the beginning or at the end. Both Kent and Bastien ultimately conclude for the latter. The Constantian issues must therefore have been the last issues struck at the Trier mint prior to its retrieval by Constantius (Bastien 1964: 71). As shown in Table 1, the explanation lay in two denominations by each issuer rather than several single issues produced at consecutive instances. Furthermore, it is implausible that there could have been a revolt with an issue of coins, a subsequent recapture by Decentius with its issue of reduced coins, and yet another revolt with a further reduced coin issue (which would have to be the conclusion if one were to accept that the Constantian Chi-Rho issue should be placed at the beginning or middle of the Magnentian Chi-Rho coinage generally).

The weights and diameters of these coins and their pattern of reduction may be used to give us a firmer indication of the successive issues and point us towards a date for the revolt. Fernando López-Sánchez was able to examine closely a significant number of pieces (24 from Trier in the name of Constantius II, out of 93 pieces total) in the intact Welbourn hoard (Burnett and Hill, in press) and concluded, in opposition to Bastien, that the weight reduction patterns were deliberate and represented different and successive issues (López-Sánchez, in press).

Hoard evidence also gives us an indication as to the sequence of issues. There are hoards that contain Chi-Rho coins of Magnentius and Decentius but none of Constantius. There are hoards that contain many of these pieces and only a few Constantian. In a survey of the available published hoard evidence, I have found no documentation of any hoards that contain a number of Constantian Chi-Rho pieces and either 1) few Magnentian pieces, or 2) Magnentian pieces that are of a weight lower than the respective Constantian pieces. Whether assessing the issues by weight or by diameter, it is evident that all of the Chi-Rho coins in the name of Constantius follow those of Magnentius, and that no more of Magnentius or Decentius were issued afterwards.

This adds further weight to a terminal date late in August or perhaps early September 353. We do not yet have a firm commencement date, but we do have the event of Decentius' loss of Trier. Whether that was in June or July 353 or slightly earlier is not known, but we must consider the time it would have taken Decen-

tius—with an imperial entourage—to negotiate the approximately 600 kilometers over ancient roads and paths from Trier to Ambianum and then on to Agedincum. A direct line from Trier to Ambianum is approximately 300 kilometers (190 miles) and then to Agedincum a further 200 kilometers (125 miles). An overland route would add substantially to these distances. A very rapid journey on horseback would probably take a minimum of about four days; on foot perhaps ten days would be needed.¹⁴ The more likely travel time ranges from about two weeks as a realistic minimum and perhaps as much as six weeks if one allows for short stays in camp, delays caused by weather, indirect or impassable tracks, and other unforeseen events. Working backwards from the indicated date of Decentius' death at Agedincum on 18 August, the likely departure date was in late June or early July and mid-July at the latest.¹⁵

Working forward, we may follow a number of chronological markers to establish the likely *terminus post quem*. We know that the Magnentius Chi-Rho pieces cannot have been produced before Decentius' elevation to Caesar, as his portrait and titles also appear on the obverses of each of these issues. This initially narrows the possible period of issue to a little more than two years. That they were only struck at mints retained after the battle of Mursa and his subsequent withdrawal from Italy in late September 352 reduces that period to about ten months. Kent and Bastien both have the Chi-Rho issue beginning at some time between late 352 and early 353, with Bastien favouring the latter. This leaves a period of about eight months for the entire Chi-Rho coinage. It is within this period that we must find evidence for the revolt coinage.

Kent offers his belief that the revolt, and with it the coinage, cannot have taken place much before the final advance of Constantius against Magnentius in August 353 (Kent 1959: 106), adding later, in relation to the Magnentius SALVS coinage, that "the issue ceased significantly before August 353" (Kent 1981: 43; Bastien 1964: 71f). Whilst there is little more available to us to narrow the date within this period, it more importantly fails to contradict the likelihood of a date in June or July.

These Constantian pieces are rare but not excessively so. The coins show the use of a good number of both obverse and reverse dies, the obverses showing at least three variations in the portraiture. The conclusion to draw from this is that

14. Consideration must also be given to the possibility of additional skirmishes (though none are specifically recorded), scouting procedures seeking the best and safest routes, as well as time taken in the setting up and breaking down of secure encampments.

15. We must also remember that for news of Magnentius' death to be directed to Decentius at Agedincum, and not Trier or some other place, he must have already sent word of his location to Magnentius beyond or at Lyons some time before or around the time of his death on 10 August.

they must have been produced over a number of weeks rather than days (López-Sánchez, *in press*).

If we accept the terminal date in late August as being the end of production for these pieces and consider both the time for Decentius to travel from the city and the time necessary for such a variety in the dies, then we approach a date in early July for the beginning of the revolt. It is therefore quite reasonable to narrow the period of issue of the Constantius/Poemenius Chi-Rho coins to July–August 353. Extending the time period to late June–early September is only slightly less acceptable, and would allow for factors that are as yet unknown.

One additional matter is addressed by Bastien, that of the imagery of the gold issue (Bastien 1983a: 188f; 1983b: 247f). He proposes that the position of the figure of Victory in relation to Constantius is indicative of victory achieved, as opposed to victory desired, and thus the issue must follow Magnentius' loss in the battle at Mons Seleucus (best dated to late July 353). For this to be feasible, news of this battle had to travel a distance of more than 600 kilometers, which would have taken a minimum of about four days to traverse.¹⁶ By this reasoning the news would have arrived quite some time after Decentius' most likely time of departure from Trier.

This does not mean that the gold issue does not have a reference to the victory. It certainly could have been struck after the news arrived at Trier and also after Decentius had already departed. In all likelihood the timing of the victory precludes it from being the impetus for the closing of the gates against Decentius and subsequent revolt coinage. The gold is clearly much rarer than the bronze, with few specimens known, and there seems no reason why the bronze coinage could not have been struck exclusively from the initial stages, to be complemented with a celebratory gold issue a few weeks into the revolt, with both issues, or perhaps only the bronze, then continuing until being terminated by Constantius.

CONCLUSION

All of the evidence discussed above points to the Constantian Chi-Rho pieces having been issued in relation to the revolt of Poemenius. It also indicates that they were the last issues of the city of Trier before its recapture by Constantius. The issue heralded the Magnentian clan's consequential loss of power at Trier and in the West. They also bear testimony to a little known chapter of Roman and numismatic history.

16. For more information on the probable travel time, we need only look at the time it took for Decentius to hear of the death of Magnentius—about seven days for urgent news to travel from Lyons to Sens (approximately 300 kilometers).

Sadly, we do not know more about Poemenius himself. We do not know his rank, his status, or his relationships with those before or after him. A single line in a tome written long ago and partially lost is all that remains of his existence and his name—that and the legacy of a small issue of coins.

NOTE ON THE PLATES

1. Magnentius, AE2 / double centenionalis
Obv.: DN MAGNEN-TIVS P F AVG
Rev.: SALVS DD NN AVG ET CAES; in exergue: TRS
RIC VIII Trier 323, author's collection
2. Constantius II, AE2 / double centenionalis
Obv.: DN CONSTAN-TIVS P F AVG
Rev.: SALVS AVG NO[STRI]; in exergue: [TRP*]
Ref.: *RIC VIII* Trier 335, author's collection
3. Constantius II, AE2 / double centenionalis
Obv.: [DN CONS]TAN-TIVS P F AVG
Rev.: SALVS AVG NOSTR[I]; in exergue: TRP*
RIC VIII Trier 335, author's collection

APPENDIX 1

- Bland, Roger and John Orna-Ornstein. 1997. *Coin hoards of Roman Britain*, vol. 10. London; the Wheaton Aston hoard (7 specimens) and the Haxby B hoard (7 specimens).
- Bland, R. 1992. *The Chalfont hoard and other Roman coin hoards*. London; the Coleshill hoard (6 specimens), the Wokingham hoard (19 specimens), and the Shipham hoard (45 specimens).
- Burnett, Andrew and J. D. Hill. In press. Welbourn, Lincolnshire. In: *Coin hoards of Roman Britain*, vol. XII. London; the Welbourn hoard (42 specimens).

Sale and Auction Catalogues

These catalogues were chosen for the detail in their entries, the clarity of their illustrations and the range and quantity of material handled by each company. The location of each company (USA, UK, and Germany) was also considered. The catalogues cover much of the past twenty years. Any duplicated items were disregarded. There are, undoubtedly, entries in catalogues not consulted, which are not thought to significantly affect the results, if at all. The completeness of the series of catalogues within the reference library consulted was a minor, though relevant, factor.

Classical Numismatic Auctions (CNA), later Classical Numismatic Group (CNG),
 Pennsylvania USA, auction 7 (May 1989) lot 445

CNG 29 (March 1994) lot 883

CNG 37 (March 1996) lot 1995

CNG 38 (June 1996) lot 1170

CNG 39 (September 1996) lot 1795

CNG 41 (March 1997) lot 2317

CNG 43 (September 1997) lots 2573, 2574, and 2575

CNG 49 (March 1999) lot 1813

CNG Triton 3 (December 1999) lots 1219 and 1220

CNG 57 (April 2001) lot 1424

CNG 60 (May 2002) lot 1922

Giessener Münzhandlung GmbH, later Gorny & Mosch Giessener Münzhandlung
 GmbH (GM), Munich Germany, auction 97 (October 1999) lot 1215

GM 108 (April 2001) lot 2078

GM 113 (October 2001) lot 6045

GM 114 (March 2002) lot 418

GM 122 (March 2003) lot 2286

Italo Vecchi Ltd, Nvmmorvm Avctiones (Vecchi), London England, auction 7
 (October 1997) lot 1051

Vecchi 10 (March 1998) lots 1176 and 1179

Vecchi 13 (September 1998) lot 956

Vecchi 15 (June 1999) lot 1194

Numismatik Lanz (Lanz), Munich Germany, auction 38 (November 1986) lot
 933

Lanz 60 (June 1992) lots 923, 924, and 925

Lanz 62 (November 1992) lot 894

Lanz 100 (November 2000) lots 579, 589, and 592

Plus a small number of items from private collections, including that of the
 author.

APPENDIX 2

Proposed dates of issues offered by each author. The general order and breakdown
 of issues is broadly agreed to by the authors, although they are not in agreement on
 the respective dates of these issues, especially in relation to the date of Decentius'
 elevation.

Bastien (1964) phases	Reverse legend(s)	Kent (1981) groups	
Phase 1 January–February 350	FEL TEMP REPARATIO	First group, first series: January 350–March 351	Before Decentius' elevation
Phase 2 February–May 350	FELICITAS REI PVBLICE	First group, second series: January 350– March 351	
Phase 3 May–August 350	GLORIA ROMANORVM		
Phase 4 August–December 350	VICTORIAE DD NN AVG ET CAES (with column)	Second group, first series: late 351	After Decentius' elevation
Phase 5 January 351–August 352	VICTORIAE DD NN AVG ET CAES VICT DD NN AVG ET CAES (without column)		
Phase 6 August–December 352	VICTORIAE DD NN AVG ET CAES (chris- togram)	Second group, second series: 352	
Phase 7 January–August 353	SALVS DD NN AVG ET CAES	Second group, third series: late 352–353?	

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- RIC VIII*: See Kent 1981.

BEFORE CALIPHAL COINS: TRANSITIONAL DRAHMS OF THE Umayyad NORTH

PLATES 7–11

STUART D. SEARS*

Muḥammad b. Marwān struck three different groups of coins during the 70s H (690s CE) in the caliphate's turbulent northern provinces as he attempted to consolidate Umayyad authority. The attribution of the coins poses significant challenges since they generally lack meaningful mint legends, dates, and name legends. The article solves these problems through careful examination of the coins' details in the broad context of other coinage, hoards, and inscriptional evidence from monuments of this period. The coins are important since they mark the first regular coinage in this region in many years and presage the introduction of dirhams a few years later.

A group of provinces in the northern reaches of the Umayyad caliphate struck a number of loosely related issues of drahms shortly before the introduction of dirhams at the end of the first century H (seventh century CE). The coins are important because they represent a transitional stage in the North's monetary development. They appear nearly simultaneously as separate and consecutive emissions in a region that traditionally struck very little regular coinage, presaging even more substantial changes just a few years later.

The drahms for the most part follow local conventions. Their prototype, name and marginal legends, and weight standards are peculiar to the North and even individual provinces in the region. The Umayyad governor-general Muḥammad b.

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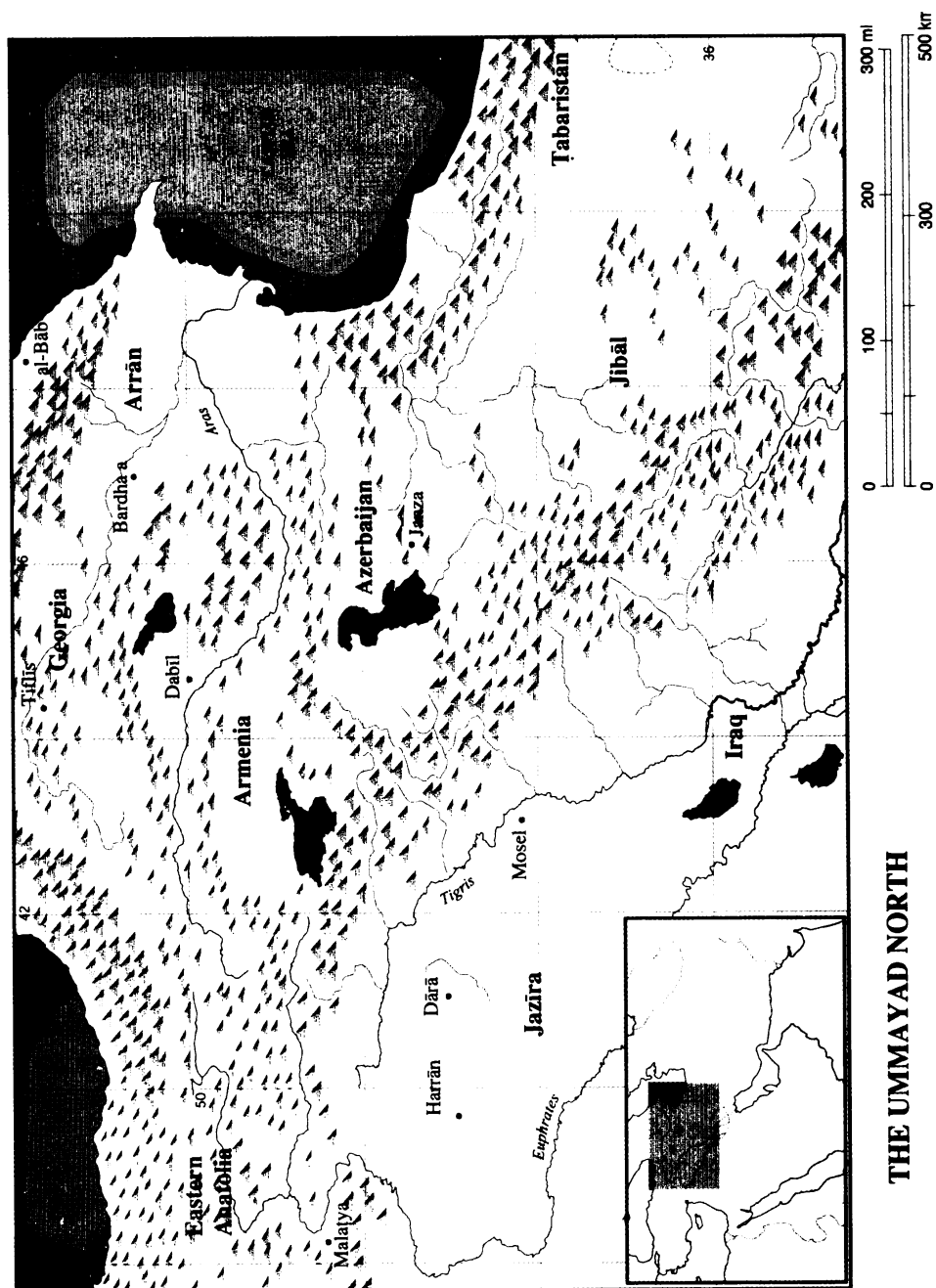


FIGURE 1. The Umayyad North.

Marwān seems to have initiated the coins' production. He arrived in the North in 73 H (692-93 CE) and five years later struck its first dirhams.

THE NORTH

The North is a modern though well-suited appellation for the Umayyad caliphate's northern provinces (Fig. 1). The region formed a major administrative division comparable to the West (Maghrib) for North Africa and Spain and the East (Mashriq) for Iraq, Iran, and Central Asia. It was loosely bounded in the west by eastern Anatolia and the Black Sea, in the north by the Caucasus mountains, in the east by the Caspian Sea, and in the south by the more densely settled lands of central Iraq and Jibāl (Media). Arabic sources refer to it by the name of one or more of its constituent provinces. These include "the Jazīra", "Armenia", and "Armenia and Azerbaijan" (Bates 1989: 89).

The Muslims brought a semblance of unity to the region. Before the Muslim conquests its rugged terrain and diverse ethnic populations caused it to be divided into small kingdoms and weak client states on either side of the Byzantine and Sasanian frontiers. Imposing mountains, fertile valleys, and arid plains created diverse patterns of settlement. The region's inhabitants were variously Greeks, Arabs, Armenians, Georgians (Iberians), Kurds, Khazars, and Persians. The Byzantines, Sasanians, and outside nomadic groups often intervened in its affairs. Nearly incessant war between the Byzantines and Sasanians and invasions by Khazars and Huns ravaged it in the sixth and early seventh centuries CE.

The Umayyad caliph 'Abd al-Malik b. Marwān first organized the North into an administrative unit after the second fitna (60-72 H/680-92 CE). He joined the province of Mosul to the western portions of the Jazīra and appointed his brother Muḥammad governor general over it and all lands to the north (Ibn al-A'tham 1972: 6.293-294). Muḥammad cemented the unity of the region over the next two decades, often ruthlessly subduing its rebellious peoples.

The attribution of almost any coinage to the North is significant. The Byzantines and Sasanians either had no interest in striking coinage in these lands or minted there ephemerally. Aside from GWGWN?/ZWZWN? and its variants,¹

1. Most authorities have not attempted to attribute this legend. Paruck [1924] 1976: 194-95 nos. 266-70, 480-81 plate XXVI.10-12, 14; Walker 1941: 2 plate XXX; Paruck 1944: 133 nos. 252, 252a-d; Gyselen and Kalus 1983: 148; Malek 1993: 240-43. A. Nikitin suggested it belonged to the Caucasus in a paper presented at the University of Tübingen in 1993. Indeed, its presence on Georgian imitations supports its attribution to some site in or near Georgia.

the attribution of Sasanian mints is controversial.² The Umayyads showed greater interest but generally restricted their production of dirhams to an itinerant mint attached to the governor's court (Bates 1989). Local magnates also struck coins. The full extent of their activities, however, is not clear. Georgian rulers minted a series of Hormizd IV imitations during the first half of the seventh century ce (Paruck 1976: 482-83 plate A). Unidentified moneyers struck more obscure imitations of these and other Sasanian coins during the seventh and perhaps the eighth centuries ce (Mousheghian et al. 2000: 35-39, 107-30, 182-90).

The Muslim *drahms* described here comprise several distinct groups of emissions. Each represents the output of a particular mint or a small group of related mints; however, identifying where, when, and by whom they were struck is not easy. The coins lack reliable mint legends and dates, and only the latest group has an authentic name legend. Their attribution rests on the careful analysis of a wide range of minor details.

Shahāda Type

The first group of coins imitates Hormizd IV's *drahms* while carrying a *shahāda*—that is, an Islamic declaration of faith—in the obverse margin. The declaration states *Bism Allāh lā ilāh illā Allāh waḥdahu Muḥammad rasūl Allāh* ("In the name of God there is no god except God alone; Muḥammad is the messenger of God") (Catalogue 1-3). The coins are further distinguished by a weight standard of seven tenths of a *mithqāl*.

The type makes few changes to its prototype aside from the marginal legend. It not only replicates Hormizd's distinctive crown, borders, and marginal decorations but his name legend, the mint legend GWGWN?/ZWZWN?, and a date that

2. A number of legends have been identified with the Caucasus region but lack convincing proof. The legend ARM has been assigned to Armenia but this is doubtful (Paruck [1924] 1976: 138, 156 nos. 30, 93; Paruck 1944: 95, 107 nos. 33, 91; Malek 1991: 240-243). It occurs for a single year during Hormizd IV's reign despite his many campaigns in the region. It is attested under Ardashīr III when the region was probably under Byzantine control. It is also absent from hoards of the region (Gaube 1973: 86; Mousheghian et al. 2000: 39-40). The legend AT has been identified with Āturpādagān, near Janza in Azerbaijan (Paruck [1924] 1976: 140-141 no. 35; Malek 1993: 240-243), but both the reading and attribution are controversial. Many scholars consider it to be a variant of ST (Göbl 1971: 82-83, table XVI no. 69; Gyselen and Kalus 1983: 146 no. 10). It is also absent from hoards of the Caucasus. GNĀ plausibly identifies Janza (De Morgan 1913: 507; Paruck [1924] 1976: 153 no. 82; 1944: 106 no. 81a). Only De Morgan, however, claims to have read it. It has never been illustrated. GNĀKL is remarkably close to the expected spelling for the same city but the final L cannot be satisfactorily explained (Paruck [1924] 1976: 153 no. 83; 1944: 106 no. 81b; Göbl [1968] 1971: Table XVI no. 27; Mochiri [1977] 1983: 459, 462). Gurnet has, in fact, speculated it might be located to Kirmān (1994).

fits his regnal era. The mint legend is previously known almost exclusively under Hormizd.³ The date falls in the middle of Hormizd's reign. It is ŠTA or šaš ("six"), though it is partially effaced on all known specimens.

The choice of prototype is unusual. Muslims imitated it nowhere else. They preferred instead Khusrō II's third type and, very rarely, his second. Among non-Muslim rulers, only the Georgian princes mentioned above and some Hephthalite kings in Central Asia adopted it (Göbl 1967: vol. III tafel 83 nos. 297.1-3; Schnädelbach 2001: 3-4).

The marginal legend has survived in its entirety on two specimens and in part on a third. *Bism Allāh* ("in the name of God") appears in the first; *lā ilāh illā Allāh* ("there is no God") in the second; *waḥdahu Muḥammad* ("alone, Muḥammad") in the third; and *rasūl Allāh* ("is the messenger of God") in the fourth quadrants. The decoration of a sun and crescent at 6:00, however, divides *waḥdahu* on one of the specimens so that the *wa* appears in the second and *ḥdahu* in the third quadrants (Catalogue 2).

The legend is as remarkable as the choice of prototype. It is identical to declarations found on gold and silver issues struck in Damascus between 72 and 77 H (691 and 695 CE) (Walker 1941: 18 plates C-G; Walker 1956: Bates 1986: 239-52) and on an issue of al-Kūfa struck c. 73 H (692-93 CE) (Walker 1941: 97 plates H-I no. sch. 5; Walker 1952: 106-08 no. 1). These were minted shortly after the Umayyad re-conquest of the East. The same declaration appears slightly later on drahms of al-Ḥajjāj b. Yūsuf struck in Fārs (Walker 1941: 118-21 nos. 229-36 B.38; Album and Goodwin 2002: nos. 40-41, 215-29, 393-95, 493).

The legend forms one of the earliest distinctly Muslim declarations of faith. Previous declarations, such as those on early Muslim coins, emphasize beliefs common to most or all religious traditions. Marginal legends such as *bism Allāh* ("in the name of God"); *bism Allāh rabbī* ("in the name of God, my Lord"); and *lillāh* ("belonging to God") could be Jewish, Christian, Zoroastrian, or even polytheist. The first mention of Muḥammad's messengership—and, in fact, his name—is the marginal legend of some drahms struck in Fārs in 66 H (685-86 CE). It reads *bism Allāh Muḥammad rasūl Allāh* ("In the name of God, Muḥammad is the messenger of God") (Walker 1941: 97 plate B no. sch. 5; Gaube 1973: tafel 3 no. 35).

Other declarations insert the phrase *lā sharīk lahu* ("He has no partner") in their statement of God's unity. An Egyptian tombstone of 71 H (690-91 CE) asserts:

lā ilāh [illā Allāh] waḥdahu lā sharīk lahu wa-inna Muḥammadān 'abduhu wa-rasūluhu.

3. Paruck cites an issue of Kavād I for RY 36 ([1924] 1976: 195 no. 271) but Mousheghian and his co-authors claim only to know of specimens for Hormizd IV (Mousheghian et al. 2000: 38).

There is no God [but God], Alone. He has no partner. Muḥammad is His servant and His messenger (el-Hawary 1932: 289-93).

Inscriptions at the Dome of the Rock dated 72 H (691-92 CE) (Grabar 1996: 184-86) and on a nearby mile marker erected in 73 H (692-93 CE) (Sharon 1966: 367-72) declare the oneness of God in the same fashion, though they treat the prophet Muḥammad differently.

The prophet Muḥammad and his messengership are often not integral elements in these declarations. The Dome of the Rock omits mention of him but invokes his name separately in appeals for his intercession on the Day of Judgment (Grabar 1996: 184-86). Dinars and dirhams introduced by 'Abd al-Malik in 77 and 78 H (697-98 and 698-99 CE) are similar. The formula "There is no God but God, Alone. He has no partner" appears in the obverse fields. Excerpts from the *sūrat al-Iklāṣ* that convey the same sentiments are found in the reverse fields. The prophet Muḥammad is mentioned less conspicuously in the circular legends of alternately the dinars' obverses and the dirhams' reverses (Walker 1956: 84-200; Klat 2002).

The weight standard of the *shahāda* type is difficult to reconstruct due to its scarcity. It seems, however, to be approximately 2.9 grams or seven tenths the weight of a *mithqāl*. The only two recorded weights are 2.86 and 2.97 grams (Catalogue 1-2). The latter belongs to a slightly corroded specimen that in view of the corrosion was probably originally slightly lighter.

The intended standard seems to be about seven tenths the weights of Sasanian and Muslim drahms. Undamaged Sasanian drahms weigh about 4.14 to 4.20 grams.⁴ Most Muslim drahms are approximately 4.00 to 4.14 grams.⁵ These figures yield weights as low as 2.80 grams and as high as 2.94 grams for the fraction of seven tenths. The *mithqāl* of dinars, approximately 4.24 to 4.27 grams, is not known to have been the basis for fractional silver weights anywhere in the Umayyad period.⁶

This standard, while known since pre-Islamic times, is exceedingly rare as a mint weight until the introduction of dirhams. Arabic sources report its use in pre-Islamic Arabia and, after the Muslim conquests, suggest its use for the collection of taxes in some parts of the East.⁷ Clipped drahms in a portion of the Shirāz hoard

4. Referring to the 75th to 90th percentile in weight distributions (Sears 1997: 287-291).

5. Referring to the 75th to 90th percentile in weight distributions (Sears 1997: 294-301).

6. Referring to the 90th percentile in weight distributions on account of the more limited wear (Sears 1997: 307-311).

7. al-Wāqidi claims the standard of seven tenths of a *mithqāl* was in use in Mecca before Islam (al-Balādhuri 1983: 448-449). Other reports indicate Nishapur paid its tribute as

document it in southern Iran c. 601 CE (Sears 2001: 30–35). It is otherwise known as a mint weight only for the slightly later *Jāza hādhā* issue described below and a rare issue of Khurāsān struck in 77 H (696–97 ce) at the court mint, BBA.⁸

Use of Hormizd's drahms as prototypes and seven tenths of a *mithqāl* as a weight standard place the *shahāda* mint, which may be designated A in the absence of a reliable mint legend, securely in the North. These features are anomalous for the more central lands of the caliphate. Although Hormizd imitations were struck near both the northern and eastern frontiers, the *shahāda* type shows the same mint legend as the Georgian issues (Paruck 1976: 482–83). Hepthalite coins usually have BHL for Balkh (Göbl 1967: vol. III, pl. 83 nos. 297.1–3; Schnädelbach 2001: 3–4). The three known specimens also lack countermarks, a common characteristic of eastern coinages of this period. Tabaristān may be excluded from consideration since it did not come under Muslim control until long after the introduction of dirhams.

Hormizd IV's drahms and their imitations are so common in hoards recovered from Georgia that the use of this prototype itself locates the mint in Georgia or nearby Arrān (Table 1). Hormizd types, in all of their varieties, comprise 59% of drahms from a hoard of Tselitskaro and 54% of drahms from a hoard of Gumri. The same types constitute no more than 3% to 15% of drahms in hoards from Syria, the Jazīra, and Armenia. Although many of the specimens in the Georgian hoards are imitations, the selection of this type for imitation suggests it was common locally. Local moneyers chose it because it was familiar and readily accepted.

A dearth of documented hoards prevents the analysis of monetary circulation in neighboring Arrān. The historical circumstances leading to the prototype's predominance in Georgia, however, apply equally to this province.

Diplomatic relations, trade, and war all contributed to the influx of Hormizd's coins, though uncertainty exists over exactly when and how. Hormizd's alleged maternal ties to the Khazars may have laid the basis for diplomatic and commercial contacts in Arrān. Al-Mas'ūdī reports his mother was a Khazar princess (al-Mas'ūdī 1986: vol. 1, 280). While other accounts claim she was Turkish, Greek and Arabic historians often use the term Turkish indiscriminately for Khazars

either 700,000 or 1,000,000 dirham. The figures suggest confusion between the standard of a full *mithqāl* and seven tenths this weight (al-Balādhurī 1983: 391; Qudāma b. Ja'far 1981: 401). Nishapur belonged to Khurāsān, the same province where the mint BBA later struck an issue of drahms at this standard (see n. 8).

8. Walker 1941: 106 no. I.44; al-Naqshbandi 1969: 115 no. 65 plate 5; al-'Ushsh 1984: 91–92 nos. 118–19. I have examined, in addition, a number of other specimens from public and private collections. ANS 1975.275.1, 1991.3.255; BN 1965.555; Ex-Warden-Album collection; Rahman collection; Jazzar collection; two specimens in Album stock (1996).

Table 1. Distribution of late Sasanian types in Near Eastern hoards as percentage of all drahms (excluding half-drahms of Ṭabaristān).

Hoard	Coins	Hormizd IV	Khusrō II (2nd Type)	Khusrō II (3rd Type)
Syria				
Damascus (Taḥrīr Square) (al-'Ushsh 1972b: 305-38)	1437	8%	25%	54%
Damascus (Bāb Tūma) Gyselen and Kalus 1983: 19-25	777	8%	22%	54%
The Jazīra				
Umm al-Hajara (al-'Ushsh 1972b)	209	3%	12%	64%
Qamishliyya (Gyselen and Kalus 1983: 29-34)	332	10%	20%	43%
Unknown site (Gyselen and Nègre 1982: 185-92)	515	15%	25%	35%
Armenia				
Dabil (Duin) (Mousheghian et al. 2000: 107-30)	209	3%	18%	4 / 66%*
Georgia (Iberia)				
Gumri* (Mousheghian et al. 2000: 182-90 ^b)	92	36/54%*	21%	7%
Tsitelitskaro (Tsotselia 2002: 30-85 ^c)	1385	X?/59%*	29%	5%

*Regular type/both regular and irregular types. Irregular types replicate the original type crudely and were struck by unknown local moneyers. Mousheghian et al. refer to them as abnormal coins (2000: 35-39, 107-30, 182-90).

a. Gumri (formerly Leninakan and Alexandropol) is in modern-day Armenia but would have been part of Georgia in the Umayyad and early 'Abbāsīd periods. See map in Le Strange 1966 [1905]: map III.

b. There are some discrepancies in the description of the hoard. The table on page 39 indicates a total of 114 coins including hexagrams while pages 182-90 list only 108 coins. F. Gurnet explained this difference to me in a personal communication as resulting from the inadvertant exclusion of some half drahms of Ṭabaristān.

c. A portion of this hoard was previously published in Dzhelagania (1980-82) and discussed in Mousheghian et al. (2000:38-39). Tsotselia's work incorporates the later acquisitions by the Janishia Georgian State Museum in Tblisi so the total specimens examined is more than twice what was known to Dzhelagania. No study has yet been made to distinguish the regular from the irregular types in this hoard. The latter are imitations struck by unknown moneyers during the seventh and early eighth centuries CE.

and other Central Asian peoples. The Khazars lived in the northern portions of Arrān and in the Central Asian steppe beyond its northern border. It is possible Bahrām Chōbīn, who began Hormizd's reign as the governor of Armenia and

Azerbaijan, recruited soldiers from among them. His governorate included most of Arrān. Hormizd, moreover, turned his treasury over to him so he could choose whom he wished to accompany him on his campaigns (al-Dīnawarī 1960: 79).

Whatever basis there may once have been for peaceful relations, war became the chief Sasanian policy during the latter part of Hormizd's reign. Theophanes mentions that in 587 and 588 CE Bahrām delivered a decisive defeat to the Khazars (Turks) at Souania, just south of the Caucasus mountains (Theophanes 1997: 385-86).⁹ A Byzantine army then confronted and defeated him in Georgia (Albania) (Theophanes 1997: 385-86). Theophanes' dating is in general not precise so the statements together indicate that the first of these campaigns took place sometime in the half decade before Hormizd's death in 590 CE. This is slightly later than the date copied on the Muslim issue, corresponding to 584 CE.

Muḥammad's role in minting the *shahāda* type, is evident from the choice of marginal legend. Just as the caliph 'Abd al-Malik's declaration of faith appeared on coins of al-Kūfa after the appointment of Bishr b. Marwān in 73 H (692-93 CE), its inscription here probably followed the North's organization as an administrative unit and the dispatch of Muḥammad as its governor general in the same year. 'Abd al-Malik, Bishr, and Muḥammad were all brothers.

The coins were probably struck at Bardha'a or al-Bāb (Darband). Soon after his appointment, Muḥammad sent his nephew Maslama on a campaign against the Khazars. Maslama proved a great success, seizing al-Bāb (Darband) (Ibn al-A'tham 1972: vol. VI, 295-97). In contrast, no historical account mentions any Muslim activity in or against Georgia. Bardha'a and al-Bāb were the main cities in Arrān. The legend *Bardha'a* is attested on a dirham of 92 H (710-11 CE) (Klat 2002: 79 no. 159). *Arrān*, which probably identifies al-Bāb, is known for 89, 90, and 91 H (707-10 CE) (Klat 2002: 38-39 nos. 26-28). al-Bāb is, in addition, known for 93 H and numerous later dates (Klat 2002: 74-77 nos. 141-54). One of the *shahāda* coins has an enigmatic legend on the reverse that may identify one of these sites or another nearby location. The epigraphy is partly effaced but resembles T[G?]RLY? (Catalogue 1).

The chronology of Maslama's campaign tentatively dates the coins to 73 or 74 H (692-3 or 693-94 CE). He did not set out until the end of 73 (692-93) or sometime during 74 H (693-94 CE) after Muḥammad's pacification of Armenia. Although Ibn al-A'tham gives no dates, al-Ṭabarī (1960: vol. VI, 194) and Ibn al-Athīr (1965: vol. IV, 361) place its important battles in 73 H (692-93 CE). Muḥammad sent 'Abd

9. al-Dīnawarī says the king of the Khazars had penetrated as far as Azerbaijan (n.d. [1960]: 79).

Allāh or 'Ubayd Allāh b. Abī Shaykh al-'Awī against the Armenians and then led himself a force that repelled a combined Byzantine and Armenian army (Ibn al-A'tham 1972: vol. VI, 293). He subsequently slaughtered most of the province's notables ensuring its submission. With this task complete, he sent Maslama on his way. Maslama's campaign, moreover, probably did not last much beyond 74 H (693-94 CE). When he returned victorious, Muḥammad was still in Armenia (Ibn al-A'tham 1972: vol. VI, 294-97). He had not yet left for the Jazīra, which he did in 75 H (694-95 CE) to raid into Byzantine Anatolia (al-Balādhūrī 1996: vol. VI, 338; al-Ṭabarī 1960: vol. VI, 202; Ibn al-Athīr 1965: vol. IV, 374, 391).

It is possible that Maslama acted alone in striking this coinage. The strong Islamist orientation of its marginal legend differs profoundly from the declarations of administrative authority found on Muḥammad's later drahms. As the caliph's son, Maslama perhaps shared 'Abd al-Malik's Islamist outlook more fervently than his uncle. Muḥammad appears to have entertained mainly practical considerations in deciding on the legends for his coins.

Jāza hādhā Type

A second group of drahms imitates Khusrō II's second coinage (2-10 RY/591-99 CE) (Göbl 1971: table XII) while carrying a declaration of value in the obverse margin, *Jāza hādhā* ("This is allowable.") (Catalogue 4-8). The coins are also struck at a standard of seven tenths of a *mithqāl*.

The iconography of this type is generally faithful to its prototype. The face of the monarch is narrow, his hair is bunched in a tightly rolled ball, and the wings of his crown are set upon a high tiara. The inner serrated chain of the border extends to both wings of the crown. The attendants wear caps with flaps dangling over much of their faces. The name legend is Khusrō's.

The choice of prototype is nearly as unusual as Hormizd IV's. Virtually all prior and contemporary drahms of the seventh century CE have Khusrō II's third coinage (11-39 RY/600-28 CE) as their model. This includes most issues of the last Sasanian monarchs (Göbl 1971: tables XII, XIII); the main Muslim series struck at more than fifty mints across Syria, Iraq, and Iran (Walker 1941: 3-124); anomalous and barbarous issues of Sijistān;¹⁰ and most Hepthalite imitations of the eastern frontier (Walker 1941: 125-26). Only the earliest Ispahbad half-drahms of Tabaristān and some issues of the Muḥammad series discussed below employ Khusrō's second type; later issues of Tabaristān follow his third (Walker 1941: 130-61; Malek 1993-94).

10. Walker 1941: 18, 22-23 nos. th. 2, th. 3, I. 11 and ox. 1; 125-26 nos. 244, 245; Bivar 1968: 152-57; Shams-Eshragh 1990: 118-19 nos. 181-93; Sears 1998: 31-42.

Table 2. Mint legends and dates for the *Jāza hādhā* type.

No.	Location	Mint Legend	Date
4	Jazzar	GD?	AYWKW? (1?)
5	National Museum of Copenhagen	GD	ŠST? (60?)
6	British Museum	ŠW?	AYW (1?)
7	British Museum	SY?	ARBA (4)
8	National Museum of Qatar	AY?	illegible

The obverse marginal legend *Jāza hādhā* ("This is allowable.") declares the coins to be acceptable at some basic standard of exchange.¹¹ While the concept is familiar, the phrasing is found nowhere else on early Muslim coins. Slightly different formulations appear during the latter part of the first and the early part of the second centuries H (late seventh and early eighth centuries CE) on coppers and countermarks. The phrase *Jāza* ("It is allowable.") most closely resembles it. The phrase may occur on a rare epigraphic copper of Mosul but is indistinct (Walker 1956: 282 no. 928). The cognate term *jā'iz* ("valid") is better attested. It appears on Byzantine style coppers of Damascus (Walker 1956: 6-9, 14, *passim*) and an uncertainly identified mint, probably also of Syria (Walker 1956: 29 no. 97) as well as on a pictorial issue of Bishāpūr (Gyselen 2000: 119-20 type 4). Among epigraphic issues, it is found at Damascus (Walker 1956: 249 nos. 816 th.15), Sarūj (Walker 1956: 264 no. I.7) and, in 111 H (729-30 CE), Balkh (Gyselen 2000: 179 type 95). It also occurs on the issue of an anonymous mint probably situated in Syria or the Jazīra (Walker 1956: 214 no. 673). The term *jā'iz*, in addition, is found as a countermark on drahms circulating in eastern Iran during the second fitna (60-72 H/680-92 CE).¹²

The other legends on these coins are, in general, corrupt and meaningless (Table 2). All coins have Khusrō's name legend on the obverse. Mint legends are variously GD, GD?, ŠW, SY and AY?. Dates are AYWKW? and AYW? for 1?, ARBA for 4, and ŠST for 60?. The legends do not for the most part agree with the choice of prototype. Only the date 4 falls within the regnal years of Khusrō's second coinage. The date 1? is too early while 60? is too late. The latter date may copy from a Muslim issue. No Sasanian regnal calendar surpassed 48.

The weight standard is, like the *shahāda* type, seven tenths of a *mithqāl*. While more data would be helpful, the range of weights for undamaged specimens places it between 2.75 and 2.95 grams (Table 3). The *mithqāl* into which it is divided corresponds to 4.00 to 4.20 grams, the weights of Sasanian and Muslim drahms.

11. Gyselen confuses this legend with *jayyid* (2000: 96).

12. Kirmān: Walker 1941: 111 no. 216. Sijistān: Mochiri [1977] 1983: 423 fig. 1554; Shams-Eshragh 1990: 91 no. 121.

Table 3. Coin weights for the *Jāza hādhā* issue.

No.	Location	Weight (g)
4	Jazzar	2.98
5	National Museum of Copenhagen	(2.75)
6	British Museum	2.91
7	British Museum	2.71

Parentheses indicate weights reported by others, which I have been unable to verify personally.

The mint of the *Jāza hādhā* type may be designated B. Its choice of type and legends distinguishes it from mint A, though the corrupt mint legends do not suggest any particular provenance. It operated somewhere in the North. The prototype, marginal legend, and weight standard of its coins show little or no influence of mints in Syria, Iraq, and Iran. Where this influence may be detected, it marks the practices of mints in proximity to the North. The phrasing *Jāza hādhā*, for example, is found nowhere outside the North while the cognate legends *Jā'iz* and *Jāza* predominate in Syria rather than the East.

The distribution of Sasanian types in Near Eastern hoards supports more precisely an attribution to Armenia and Azerbaijan (see Table 1). Although they lack ample records, Armenia and Azerbaijan seem to have constituted a distinct monetary zone where Khusrō's second type was more numerous in circulation than both his third type and Hormizd's type. Khusrō's third type is two to five times more common than his second type in hoards of Syria and the Jazīra. As already noted, Hormizd's was the most common type in Georgia and probably Arrān.

The only significant documented hoard from Armenia lends support to this inference, though its evidence is at first misleading. Khusrō's second type forms 18% of the Dabīl (Duin) hoard. This is far less than the 66% attested for his third type. Yet the preponderant majority of the third type belongs to a relatively small emission of imitations. They consist of 128 of the hoard's 209 coins but account for only 34 obverse dies (Mousheghian 2000: 35-38).¹³ With these coins aside, Khusrō's third type, in fact, makes up only a little more than 4% of the hoard. A large and relatively unmixed group of imitations appears to have been added to a smaller group of drahms taken from circulation.

Khusrō's second coinage may also have predominated in Ṭabaristān. Although its hoards are poorly documented, the province adopted this coinage as the prototype for its early half-drahms (Malek 1993-94). It could not, however, have been the mint site of the *Jāza hādhā* coins. It lay outside of Muslim control at this time.

13. The analyses were based on rubbings of the coins. Examination of the coins themselves may yield slightly different results.

Military conflict probably introduced significant quantities of Khusrō's second type into Armenia and Azerbaijan. Khusrō fielded an army in Azerbaijan against Bahrām (al-Ṭabarī 1960: vol. II, 177) and campaigned between 591 and 596 CE in the region against his uncles Bindoes and Bistahm (al-Dīnawarī 1960: 91-105; al-Ṭabarī 1960: vol. II, 177). Since the campaigns were contemporary to the emissions of this type, he may have used the coinage to pay the stipends of soldiers and other military related expenses.

Sasanian mint organization and Byzantine incursions probably inhibited the subsequent influx of Khusrō's third type. Regular Sasanian mints did not operate in the region. The Byzantine occupation of Armenia at the end of Khusrō's reign, moreover, retarded the entry of new coinage. It would have disrupted the region's administrative and commercial contacts with the empire.

Dabil, the chief city in Armenia and Azerbaijan, is the most likely site for mint B. Sources invariably identify Muḥammad's appointment with "Armenia", indicating its general importance (al-Ṭabarī 1960: vol. VI, 194; Ibn al-Athīr 1965: vol. IV, 361; al-Balādhūrī 1996: vol. VI, 338). The legend *Irmīniya* appears on dirhams as early as 78 H (697-98 CE) (Klat 2002: 43 no. 45). *Dabil* is inscribed on Umayyad dirhams for 84, 85, and 86 H (703-05 CE) (Klat 2002: 117 nos. 285-87). No other Armenian cities are known on Umayyad coins.

Azerbaijan is less plausible. The capital of this province, Janza, was the site of a royal palace and a great fire temple under the Sasanians but declined under the Muslims (Christensen 1944: 166, 448, 467-69). The legend *Ādharbayjān* is known on dirhams for 78 H (697-98 CE) (Klat 2002: 36 nos. 23a-b) but scarcely occurs afterwards. *Janza* is also very scarce (Klat 2002: 37-38, 105 nos. 24-25, 47-50).

Muḥammad almost certainly struck these drahms. The coins bear similarities to the first of two sets of Muḥammad types later struck by him. They follow the same prototype and maintain many of the same incidental inscriptions for their mint legends and dates. If Muḥammad was responsible for the later coins, he most likely oversaw the production of this issue too.

The coins were probably struck c. 73 to 75 H (692-93 to 694-95 CE). Their legends and weight standard logically precede those of the Muḥammad types. Moreover, the influence of Syria and Iran, though faint, is more apparent on them than the later coins.

The *Jāza hādhā* drahms probably served Muḥammad's administrative needs. Sources emphasize Muḥammad's preoccupation with suppressing rebellions in Armenia during this period. Ibn al-Athīr claims he raided into Anatolia but gives no further information (Ibn al-Athīr 1965: 4.373). This may be confused with his defeat of the combined Byzantine and Armenian force in Armenia at this time or his later campaigns into Byzantium.

Muḥammad Series

The final group of coins is a series of inter-related types that have Khusrō II's second and third coinages as prototypes and the name Muḥammad inscribed on their obverses (Catalogue 9-27). The legend *wāfin* ("full weight or value") sometimes appears too. It seems the coins were struck by two *mints* in two phases at a standard of eight tenths of a *mithqāl*.

The series may be divided into two sets of types according to the choice of prototype. The first set, like the *Jāza hādihā* coins, imitates Khusrō's second coinage (Catalogue 9-22). The second, like Muslim drachms in Syria and the East, imitates his third coinage (Catalogue 23-27). The face of the monarch in the latter group of coins is broad, the hair is let down, and the wings of the crown are set upon a lower and flatter tiara than on Khusrō's second coinage. The inner chain is broken by the legend GDH apzwt', *xvarra afzūt* ("May glory increase."), while on the reverse the headgear of the attendants consists of rimmed hats topped with a crescent.

The two sets of types are further distinguished by the presence or absence of pellets on the reverse. The first set has a pellet to either side of the altar base. The second does not.

The inscription of the name Muḥammad is the only conspicuous feature common to all the coins. The name appears in Arabic or Pahlavi in the name legend, marginal legend, or both the name and marginal legends. The name is unusual in that it lacks a patronymic or title. While Sasanian coins normally omit this information in their legends, the opposite is true for Muslim drachms. Only in cases where name legends belong to deceased Sasanian monarchs or, on his first issues, the governor 'Abd Allāh b. 'Āmir do they occur without elaboration (Walker 1941: 49-52).¹⁴

The placement and organization of this inscription as a marginal legend is also peculiar. Names of rulers normally only appear in the name legend in front of the monarch's bust. Where they are found in the margin, they usually form one element among several in a longer phrase. The names Ṭalḥa and Mālik, belonging to Sijistān's governors Ṭalḥa b. 'Abd Allāh and Mālik b. APWS?, appear in the legends *Ṭalḥa lillāh* ("Ṭalḥa belongs to God") and *Mālik lillāh* ("Mālik belongs to God"), respectively.¹⁵ Muṣ'ab b. al-Zubayr's name is followed at al-Baṣra by Allāh

14. At Herāt, the patronymic for 'Ubayd Allāh b. Ziyād was inscribed behind the monarch's head (Walker 1941: 53, 73-74 nos. M.34, Mar.2 & O.7; Gaube 1973: table 7 no. 80).

15. For coinage of Ṭalha, Walker 1941: 95-96. For coinage of Malik b. APWS(?), Mochiri [1977] 1983: 419-26 fig. 1554. Mochiri read the patronymic as 'Aws but this cannot be supported epigraphically.

ḥasbuhu; the legend translates as “Muṣ‘ab, God is his reckoning.” (Walker 1941: 102 no. I.42). It similarly occurs on coins of Dasht Maysan (DŠ and DŠT)¹⁶ and Junday-Shapur (WH) (Walker 1941: 104 no. M.50) after the phrase *bism Allāh* (“In the name of God”).

The name must refer to Muḥammad b. Marwān. The inscription of a name on Near Eastern coins almost always indicates the importance of the person named. No other names are known on drahms of this region. Muḥammad was not only the caliph’s brother but a strong and effective ruler. He was also personally interested in minting. He subsequently attached the region’s main dirham mint to his court (Bates 1989).

Suggestions that “Muḥammad” refers to the prophet are not plausible (Gaubé 1973: 36 2.2.3.12). References to the prophet are exceedingly rare before the introduction of ‘Abd al-Malik’s epigraphic coinages. The name of the prophet never occurs alone but rather is accompanied by the terms *nabī* (“prophet”) or *rasūl* (“messenger”). More often than not, the terms *nabī* or *rasūl* suffice by themselves.¹⁷ The name Muḥammad is omitted, not his epithets. The legend *wāfin* (“full value”) that appears in the margin on some coins confirms the administrative inspiration behind these legends.

Mint legends and dates are corrupt but differ consistently between the two sets of Muḥammad coins (Table 4). In the first set, that is, imitations of Khusrō’s second coinage, mint legends are AY and A.¹⁸ Dates are ARBA, *čahar* (“four”), some truncated corruption of it, or an incomprehensible jumble of strokes (Catalogue 9-22). In the second set, that is, imitations of Khusrō’s third coinage, mint legends are ŠWY?, ŠY?, and Š?. The dates vary but never resemble ARBA (Catalogue 23-27). This is significant since not all of the legends derive from Khusrō’s third type. The dates TRY? for 2? and STA for 6 are too early while ŠST? for 60? is too late.

The legend *wāfin* (“full weight or value”) sometimes appears in the margins of the first set of types (Catalogue 9-20). It enjoins the acceptance of the coins but it is unclear what technical significance it may have had in this context. Although common on coppers of Syria and the Jazīra, the legend and its cognates are otherwise unknown on precious metal coinages. *Wāfin* first appears on Byzantine style coppers of both Aleppo (Walker 1956: 33-35) and, in the feminine form *wāfiyah*, Damascus in the reigns of the earliest Marwānid caliphs (Walker 1956: 8-9). A

16. For DŠ, specimen in ex-Warden-Album collection. For DŠT, see Walker 1941: 104 no. I.43.

17. Graffiti of Qur’ānic verse III: 41, Miles 1948: 236-42; al-‘Ushsh 1964: 280.

18. Mochiri reported a swastika instead of a mint legend on one specimen (1986: 59) but did not illustrate it.

Table 4. Mint legends and dates for the Mu'ammad series

Mint	Cat. No.	Provenance	Phase 1			Phase 2		
			Mint Legend	Date	Cat. No.	Provenance	Mint Legend	Date
B	9	Malek	AY?	RBA? (4?)	21	Ex-Timmer	A?	AS?
	10	Anonymous	AY	ARB (4?)	22	Shamma	A	A?
	11	FM	AY?	ARB (4?)				
	12	Shamma	A?	ARBA (4)				
	13	BN	AY?	A?				
	14	Peus 2002	AY?	ABA? (4?)				
	15	HM	A?	A?				
	16	Goussous	AY?	AY?				
	17	BM	A?	A?				
	18	Malek	AY?	A?				
	19	Berlin M.	A?	A?				
	20	SHM	A?	A?				
	23	Malek	ŠA?	HPTS? (37?)	27	Ex-W-A	Š?	ŠST? (60?)
	24	Ex-Malek	Š?	TRYN? (2?)				
	25	Iraq Museum	Š?	STA? (6?)				
	26	Subhi Pasha	ŠY?	NWČWYST? (29?)				
Mint B: Khusrō II's second type; pellet to either side of altar								
Mint C: Khusrō II's third type; no pellets next to altar								

similar legend *al-wafā' lillāh* ("Loyalty belongs to God") is attested on contemporary issues of less certain provenance (Walker 1956: 51-52). After 'Abd al-Malik's monetary reforms in 79 H (698-99 CE), *wāfin* occurs on epigraphic issues of Aleppo (Walker 1956: 243), al-Ramla (Walker 1956: 256), 'Asqalan (Walker 1956: 273), and Ghazza (Walker 1956: 275). Yet, in the East only the cognate *wafā'* appears and at a much later date. The legend 'Amara 'Abd al-Hamīd bi-l-wafā' wa-l-'adl ("Abd al-Hamīd ordered [this] with good faith and justice") was inscribed at al-Kūfa in 100 H (718-19 CE) followed the same year by 'Amara Allāh bi-l-wafā' wa-l-'adl ("God ordered [this] with good faith and justice") (Walker 1956: 278-79). The second of these legends was adopted at Wāsiṭ, Jayy, and al-Rayy in 101 H (719-20 CE).¹⁹

The two sets of Muḥammad types must, despite their similarities, represent the emissions of separate mints (Table 4). The evidence of the underlying Khusrō types is important. Obverses and reverses are almost always found coupled with opposites of the same respective type. It is unlikely that a single mint would have changed or alternated its types in such a consistent manner. There is only one exception. A specimen of the second mint follows Khusrō's second type for its obverse and his third type for its reverse (Catalogue 23).

The two mints appear to have deliberately distinguished their identities through the presence or absence of pellets next to the altar base. As already noted, the use of these pellets differs consistently with the choice of prototype. There is again only one exception. A specimen of the first set of types that ought to have pellets lacks them (Catalogue 9). Regular, though incidental, differences in the inscription of mint legends and dates confirm the coins' separate origins.

The first set of types appears to belong to the previously discussed mint B of Armenia. These coins and the *Jāza hādhā* type of mint B share the same rare prototype and have similar sets of corrupt inscriptions for their mint legends and dates. The mint legends AY? and A? of the Muḥammad coins, in fact, seem to mark an advanced stage in the deterioration of AYW? and AY? found on the earlier *Jāza hādhā* coins. The corrupt imitation of ARBA for the year 4 may similarly derive from the date on one of the earlier coins.

The second set of Muḥammad types, on the other hand, must represent an altogether new mint. The coins differ from emissions of mints A and B not only in their choice of prototype but in their incidental inscriptions. The new mint may be designated C.

19. Wāsiṭ: Walker 1956: 285 no. P.146, 939; Jayy: Walker 1956: 241 no. 783; al-Rayy: Walker 1956: 260-61 nos. 880-82.

Table 5. Chronology of Muḥammad types.

Mint	Legend	Phase 1	Phase 2
B	Name Legend	MHMT'	MHMT'
	Marginal Legend	Wāfin	Muḥammad
C	Name Legend	HWSRWY	MHMT'
	Marginal Legend	Muḥammad	Muḥammad

Parallel changes in name and marginal legends suggest mints B and C struck their coins in two phases (Table 5). In an initial phase both inscribed the name Muḥammad but in different locations. Mint B placed the Pahlavi MHMT' ("Muḥammad") in the name legend and the Arabic *wāfin* in the margin. Mint C added the Arabic *Muḥammad* to the margin while keeping the Pahlavi HWSRWY ("Khusrō") of the prototype in the name legend. In the second phase, the two mints replaced *wāfin* and Khusrō with the governor general's name. Only the Pahlavi MHMT' ("Muḥammad") appears in the name legend and the Arabic *Muḥammad* ("Muḥammad") in the margin. This may be confirmed on one coin by the residual traces of *wāfin* under *Muḥammad* (Catalogue 21).

The weight standard for this series is eight tenths of a *mithqāl* (Table 6 and Figure 2). This is best documented at mint B. The weight distribution at this mint shows a modal cluster between 3.2 and 3.3 grams. This corresponds to a standard of eight tenths derived from a *mithqāl* of about 4.00 to 4.12. The weights for mint C range widely but only three are documented in undamaged condition.²⁰ Given the coordination of legends, the two mints probably struck their coins at the same weight standard. The *mithqāl* of 4.00 to 4.12 is slightly higher than the normal standard for Sasanian drahms.²¹ It may represent the weight of worn coins still in use under the Muslims.

The standard of eight tenths is particularly unusual. Arabic sources ascribe it to only two locations, Azerbaijan and al-Ḥīra. It appears to have been Azerbaijan's main standard. Taxes were paid at none other than this weight (al-Balādhurī 1983: 317; Qudāma b. Ja'far 1981: 378). The reference may apply equally to neighboring provinces such as Armenia since the toponym Azerbaijan usually identified the North generally. At al-Ḥīra, on the other hand, reports indicate the standard was

20. al-Naqshbandi 1969: 49 no. 15 is corroded and therefore not included here. Its weight is 2.90 grams.

21. Grierson citing weights recorded by Miles suggested a theoretical standard of 4.15 grams for Sasanian drahms (1960: 248n). This agrees generally with the standard of 4.14 to 4.20 grams I have proposed based on the interval of the 75th to the 90th percentile in weight distributions of these drahms (1997: 287-91).

Table 6. Weights for specimens of the Muḥammad series.

Mint	Phase I			Phase 2		
	Cat. No.	Provenance	Weight (g)	Cat. No.	Provenance	Weight (g)
B	9	Malek	3.30	21	Ex-Timmer	(2.86)
	10	Anonymous	3.29	22	Shamma	3.41
	12	Shamma	3.13			
	13	Bibliothèque Nationale	2.54			
	14	Peus 2002	(3.06)			
	16	Goussous	3.11			
	17	British Museum	3.27			
	18	Malek	3.25			
	19	Berlin Museum	(3.09)			
	20	State History Museum	(3.22)			
C	23	Malek	3.08	27	Ex-W-A	2.97
	24	Ex-Malek	3.21			

Parentheses indicate weights reported by others either in publication or in personal communication.

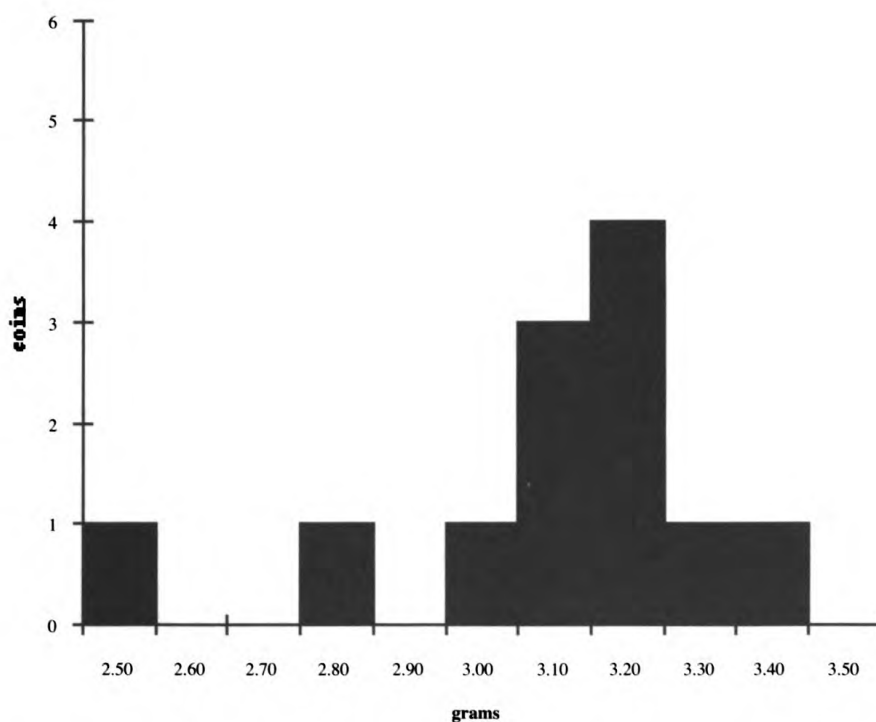


Figure 2. Weight distribution for undamaged Muḥammad drahms of mint B (Dabil?).

exceptional. Taxes were paid at either five (al-Balādhūrī 1983: 241; Qudāmah b. Jaʿfar 1981: 354-55) or six tenths (al-Balādhūrī 1983: 449). Weights of five, six, and ten tenths were used in the marketplace in addition to eight tenths (al-Balādhūrī 1983: 449). This reflected the cosmopolitan practices of a town with links to Arabia, Syria, and Iraq.

The Muḥammad series confirms the previous attribution of mint B to Dabīl in Armenia. The importance of this mint underscores its links to Muḥammad's court. Unlike other mints, it struck Muḥammad drahms in addition to *jāza hādhā* drahms. Its output for each series was larger than mints A and C judging from the number of extant specimens. Its choice of Khusrō's second type, moreover, is consistent with what probably predominated in circulation in Armenia.

The available evidence, on the other hand, places mint C in Ḥarrān in the Jazīra. Although Muḥammad's name legend and the standard of eight tenths of a *mithqāl* were characteristic of the North generally, Khusrō's third type was very common in circulation only in the Jazīra (see Table 1). Among the cities of this province, Ḥarrān was the most important. Its mint legend is inscribed on Umayyad dirhams throughout much of the eighties H (700s CE) (Klat 2000: 114-15 nos. 273-77). Mosel is less plausible. It lay some distance from the center of Muḥammad's activities in the 70s H (690s CE), though it appears on dirhams for 82 and 83 H (701-03 CE) (Klat 2002: 245 nos. 626-27). No other city in the Jazīra is found on these coins. The legend *al-Jazīra*, which appears intermittently in the late Umayyad period (Klat: 97-100 nos. 218-28), probably refers to either Ḥarrān or Mosel.

The Muḥammad series should be dated to c. 75 to 78 H (694-95 to 697-98 CE). The wording and arrangement of its legends place it after both the *shahāda* and *jāza hādhā* types. The series eliminates the last vestiges of Syrian influence and standardizes important administrative information absent from the earlier issues, such as the governor general's name. The coins, at the same time, were most probably discontinued with the introduction of dirhams in 78 H (697-98 CE).

This series marks the consolidation of Muḥammad's authority in Armenia and his new preoccupation with the Jazīra. Armenia was, of course, the seat of his administrative power. The Jazīra became an important theatre for military activity. Muḥammad attacked Byzantium in 75 H (694-95 CE) near Mar'ash²² and in 76 H (695-96 CE) at Malatya (Ibn al-Athīr 1965: vol. IV, 418). These campaigns would have originated in or passed through the Jazīra. He also subdued an Arab revolt near Dārā in 76 H (695-96 CE).²³ 'Abd al-Malik's son al-Walid led the summer raids

22. al-Ṭabarī 1960: vol. VI, 202; Ibn al-Athīr 1965: vol. IV, 374, (near al-Ghaniq) 391; al-Balādhūrī 1996: vol. VI, 338.

23. Bates 1989: 94, citing Caetani.

Table 7. Chronology of mint activity in the North, c. 73–78 h (693–698 CE)

Province	Mint	c. 73–75 H (692–96 CE)	c. 75–78 H (694–98 CE)	78 H (697–98 CE)
The Jazīra (Harrān)	C		Muḥammad	
Armenia (Dabīl)	B	<i>Jāza hādhā</i>	Muḥammad	Dirham
Azerbaijan (Janza)				Dirham
Arrān (Bardhāʾa?, Darband (al-Bāb?))	A	<i>shahāda</i>		

against Byzantium in 77 H (696–97 CE) (al-Ṭabarī 1960: vol. VI, 318; Ibn al-Athīr 1965: vol. IV, 447) and Yahyā b. al-Hakam in 78 H (697–98 CE) (al-Ṭabarī 1960: vol. VI, 321) so it appears Muḥammad returned to Armenia after 76 H (695–96 CE).

CONCLUSION

The drahms described here are of great importance. They mark the emergence of a distinctly regional monetary system in the North between 73 and 78 H (692–93 and 697–98 CE), at the same time the caliph ‘Abd al-Malik experimented with new coin types in Damascus. The drahms are practical if not visionary. They mark the North’s first regular production of coinage in many years. They furthermore establish some measure of uniformity in its money while accommodating as far as possible varied local traditions in their choice of types and weight standards. Although the coinage failed to take root, it prepared the way for the introduction of dirhams.

Four features distinguish the drahms. First, they express a Muslim and Arabic identity distinguishing different emissions through only name and marginal legends. The *shahāda* and *Jāza hādhā* types have distinctive Arabic phrases in their margins. The Muḥammad types carry the name Muḥammad in either the name or marginal legend or in both these legends. Mint legends and dates never received the same attention; they are always corrupt.

Except for the *shahāda* type, the legends emphasize administrative information rather than ideological propaganda. Declarations of value, such as *Jāza hādhā* (“This is allowable.”) and *wāfin* (“full weight or value”), and the name of the governor general appear on the coins. They form the barest statements, much less symbols, of political and religious authority.

The Arabic and Pahlavi phrases, moreover, increasingly identify the coins with the person of the governor general rather than the caliph. The *shahāda* type projects the authority of ‘Abd al-Malik’s government in Damascus. Its declaration of faith appears simultaneously on coins of Syria, the North, and Iraq. The marginal legend of the *Jāza hādhā* issue, on the other hand, marks a distinctly regional influence. Although the content of the legend is unremarkable, its phrasing occurs

nowhere outside the North. Muḥammad's authority is stated even more clearly on subsequent emissions as his name appears first in either the name or marginal legends and later in both these legends.

The second feature of Muḥammad's coinage is its unusual choice of proto-types. These varied according to what was common in local circulation. Mint A in Arrān adopted a Hormizd type. Mint B in Armenia followed Khusrō II's second type. Mint C in the Jazīra copied Khusrō's third type. Different types sometimes have the same name and marginal legends. Khusrō II's second and third types, representing mints B and C, both carry Muḥammad's name in their name and marginal legends in the second phase of the Muḥammad series.

In addition, Muḥammad's drahms seem to have maintained distinctive regional weight standards. The *shahāda* and *Jāza hādhā* emissions were struck at seven tenths and the Muḥammad drahms at eight tenths of a *mithqāl*. The standards are previously found nowhere else in the caliphate as mint weights. The choice of weight changed over time rather from province to province. Mints B and C struck their Muḥammad types at eight tenths of a *mithqāl* in Armenia and the Jazīra respectively. The replacement of the standard of seven tenths by eight tenths marks the coinage's increasing identification with regional rather than caliphal monetary practices. It corresponds to similar changes in the coins' legends.

Finally, Muḥammad kept his mints for the most part attached to his court or the court of one of his underlings. He opened mint B in Dabīl where he held court. He organized other mints elsewhere on a more occasional basis according to military exigencies. Mint A probably operated in Bardha'a or al-Bāb, supporting Maslama's campaign in Arrān, c. 73-74 (692-94 CE). Mint C seems to have struck coins at Harrān for Muḥammad's expeditions in or passing through the Jazīra c. 75-76 H (694-96 CE).

The constitution of the North as an administrative unit probably served as the main impetus for the production of these coins. The unification of the region's far-flung provinces concentrated tax revenues in the treasury of its new government while, at the same time, creating new expenses. This increased its transactions and, in turn, its need for money.

The decentralized character of previous governments had limited the North's monetary needs. Tax obligations accrued mainly to local magnates and sometimes to provincial governments. The governments probably satisfactorily discharged most of their obligations with barter, credit, and other monetary substitutes. Where they needed coinage, they appear to have resorted to circulating specie or minted obscure imitations in small quantities.

Unification changed the situation. Muḥammad fielded larger armies than his predecessors, kept them in the field on nearly a permanent basis, and paid them from local revenues. This allowed him to levy taxes and tribute in earnest.

It also incurred great costs. Among these, the armies' salaries must have been substantial.

The long and distant expeditions that were the hallmark of Muḥammad's rule probably increased the demand for coinage in the payment of these salaries. Soldiers would have needed reliable means of exchange more than ever before as networks of exchange were poorly established or easily disrupted on their campaigns. Muḥammad may have ameliorated the difficulties by purchasing quantities of circulating Sasanian drahms, but his needs probably sometimes exceeded his ability to obtain coinage locally, especially at moments of crisis. As quantities of worn and broken coins, plate, and other commodities accumulated in the treasury, he seems to have begun thinking about striking his own coins.

Muḥammad's successive issues of drahms offered in this context a modest solution. The dearth of die-links among these coins suggest they were originally far more numerous than what has so far been recovered. The drahms indicated the nominal authority of the Muslim government in their legends but otherwise followed what suited local custom. The use of unusual mint weights undoubtedly reflected the fact that they circulated by weight rather than count. They did not need to conform to the standards of previous issues of coins but rather what was currently in use in the scales of local markets.

Contemporary monetary experiments in Damascus would have encouraged Muḥammad's initiative. It is possible his army even received its first payment with some of 'Abd al-Malik's experimental drahms. It departed Damascus in 73 H (692-93 CE), a year after the first emissions.

The independent character of Muḥammad's drahms, however, reflects his vastly different outlook and policies. The governor general contented himself with only rudimentary devices for the coinage's control. He identified the coins with his government, if not himself but neglected their mint legends and dates. In contrast, 'Abd al-Malik carefully inscribed these legends.

Muḥammad also rejected a staunchly Islamist orientation in his choice of iconography and marginal legends. After the *shahāda* type, Muḥammad's coins notably avoid any ideological sentiment. In contrast, the caliph's experimental coins disfigure important Christian and Zoroastrian icons, introduce peculiarly Islamic motifs, and convey statements of distinctly Islamic faith.

This is significant since it raises questions about the particular inspiration of 'Abd al-Malik's later dinars and dirhams. While obviously legendary in their details, historical accounts that give any sort of explanation attribute their Islamist influences to antipathy between the caliph and the Byzantine emperor. This explanation, however, is simplistic. Muḥammad did not lack antipathy toward Christianity. He waged extensive campaigns against both Armenian Christians and the Byzantines. He proved, nevertheless, reluctant to adopt 'Abd al-Malik's

earliest Islamist legends. Other concerns must have played a role in 'Abd al-Malik's initiative and Muḥammad's response.

In the end, 'Abd al-Malik's vision of an Islamist money prevailed. His dirhams replaced Muḥammad's drahms. The all-Arabic and epigraphic coins eliminate all figural images. Their legends declare pointedly Islamic articles of faith. Among them, is the vow *li-yuḥḥirahu 'alā al-dīn kullihī wa-law kariha al-mushrikūna* ("to establish [the religion of truth] over all religion even if the corruptors detested [it]") (Walker 1956: 104).²⁴ The dirhams aptly imposed a new coin type and the standard of seven tenths of a *mithqāl* where other types and weight standards had been employed.

The introduction of dirhams in the North, however, owed something to Muḥammad's experience. He struck dirhams in Armenia and Azerbaijan in 78 H (697-98 CE), a year before they appeared almost anywhere else. While his brother the caliph received credit for the innovation, he retained effective administrative control over the region's mints. He attached the main and, for most years, only dirham mint to his court just as he had done earlier with his drahms.

CATALOGUE

Abbreviations

AM = Ashmolean Museum. Oxford, UK.

BM = British Museum. London, UK.

BN = Bibliothèque Nationale. Paris, France.

FM = Fitzwilliam Museum, Cambridge, UK.

HM = Hermitage Museum. St. Petersburg, Russia.

SHM = State Historical Museum. Moscow, Russia.

MINT A (Bardha'a? or al-Bāb (Darband)?)

Shahāda Issue (c. 73-74 H/692-94 CE)

All coins follow Hormizd IV's type.

1. ZWZN? 6? (ŠTA?). Hormizd (AWHRMZD). 28-29 mm. Die axis?. Undamaged. 2.86 g. Sotheby's (1998: 12 no. 1).
Obverse margin: *bism Allāh/lā ilāh illā Allāh/wahdahu Muḥammad/rasūl Allāh*
Reverse margin: T[G?]RLY?
Mint legend and date are damaged in striking. Reading of reverse marginal legend is also in doubt, though the epigraphy is relatively clear. Most of the

24. This is a close approximation of the Qur'ān 9:33 and 61:9. The pronoun *-hū*, however, has been substituted for *rasūlahu*.

epigraphs may have any of several phonetic values. The first is T. Although partly effaced, the second seems to be G but may be D or Y. The third is a variant for L or R while the fourth represents its normal form. The last is either Y or B.

Plate 1.

2. ZWZWN?. 6 (ŠTA). Hormizd (AWHRMZD?). 29-31 mm. 3:00. Corroded slightly. 2.97 g. Anonymous collection.
Obverse margin: *bism Allāh/lā ilāh illā Allāh wa/ḥdahu Muḥammad/rasūl Allāh*
Mint legend is indistinct.
Plate 2.

3. ZWZWA?. 6? (ŠTA?). Hormizd (AWHRMZD?). 23-28 mm. Die axis?. Clipped. Weight not recorded. Istanbul Museum. Walker (1941: 24 no. I.24, pl. XXX.1); Göbl (1967: plate 8 no. XXIII); Shams-Eshragh (1990: 96 no. 139).
Obverse margin: *[bism Allāh/lā ilāh illā Allāh]/waḥdahu Muḥammad/[rasūl Allāh]*
Most of margin is clipped away. Mint legend is indistinct.
Plate 3.

MINT B (Dabīl)

Jāza hādhā Issue (c. 73-75 H/693-95 CE).

All coins follow Khusrō II's second type.

4. GD? 1 (AYWKW). Khusrō (HWSRWY). 26-28.5 mm. 3:00. Undamaged. 2.98 g. Jazzar collection.
Obverse margin: / *Jāza hādhā* /
Marginal legend has same style as no. 6 but obverses are not die-linked.
Plate 4.
5. GD. 60? (ŠST?). Khusrō (HWSRWY). 26-28 mm. Die axis not recorded. Undamaged. (2.75 g.). National Museum of Copenhagen. Ostrup (1938: 7 no. 61); Walker (1941: 11 no. C.1).
Obverse margin: / *Jāza hādhā* /
Part of marginal legend is effaced; Walker was unable to read it. Diameter measurement is an estimate based on his illustration. Specimen appears from this illustration to be undamaged. Weight was recorded by Walker.
Plate 5 (illustration from Walker).
6. ŠW?. 1? (AYW?). Khusrō (HWSRWY). 27.5-29 mm. 3:00. Undamaged. 2.91 g. BM OR 0236.

Obverse margin: / *Jāza hādhā* /

Oval-shaped flan. Marginal legend has same style as no. 4 but is not die-linked.

Plate 6.

7. SY?. 4? (ARBA?). Khusrō (HWSRWY). 26-28.5 mm. 9:30. Undamaged. 2.71 g. BM 1961 5-6-2 (R. Göbl).

Obverse margin: / *Jāza hādhā* /

Oval-shaped flan.

Plate 7.

8. AY?. Date? (illegible). Khusrō (HWSRWY). 25-28 mm. Die axis not recorded. Clipped? (2.55 g.). The National Museum of Qatar, no. 215. al-'Ushsh (1984:52-53 no. 1).

Obverse margin: / *Jāza hādhā* /

Date is illegible on al-'Ushsh's plate, though he attempts to read it as TŠA ("nine"). Specimen appears clipped. Weight was recorded by al-'Ushsh.

Plate 8.

Muḥammad Issues (c. 75-78 H / 694-98 CE)

All coins follow Khusrō II's second type and have pellet to either side of altar base except where noted. Marginal legend changes from *wāfin* in phase 1 to *Muḥammad* in phase 2.

Phase 1

9. AY?. 4? (RBA?). Muḥammad (MHMT). 26.5-28. 4:00. Undamaged. 3.30 g. Malik collection.

Obverse margin: / *wāfin* /

No pellets to either side of altar.

Plate 9.

10. AY. 4? (ARB). Muḥammad (MHMT). 25-27 mm. 3:30. Undamaged. 3.29 g. Anonymous collection.

Obverse margin: / *wāfin* /

Plate 10.

11. AY? 4 (ARB). Muḥammad (MHMT(W)). Diameter not recorded. 6:00. Clipped. 2.90 g. FM.

Obverse margin: / *wāfin* /

Date is partly effaced but clear.

Plate 11.

12. A? 4 (ARBA). Muḥammad (MHMT(W)). 29-31 mm. 3:00. Undamaged. 3.13 g. Shamma collection. Cited and illustrated as Shamma 1 in Sears (1995: plate, no. 1); Album and Goodwin (2002: plate 34 no. 494).
Obverse margin: / *wāfin* /
Plate 12.
13. AY? Date? (A?). Muḥammad (MHMT). 25.5-27 mm. 3:00. Undamaged? 2.54 g. BN 1968.699; cited in Sears (1995).
Obverse margin: / *wāfin* /
Plate 13.
14. AY? 4? (ABA?). Muḥammad (MHMT(W)). 27.5-28.5 mm. Die axis? Undamaged. (3.06) g. Peus (2002: 91 no. 1472).
Obverse margin: / *wāfin* /
Weight was recorded by M. Rashad.
Plate 14.
15. A?. Date? (A?). Muḥammad (MHMT). (26) mm. 9:00. Holed. (2.11). Hermitage Museum. Kolesnikov (1998: 364-65 and table VI no. 62).
Obverse margin: / *wāfin* /
Diameter and weight was recorded by Kolesnikov.
Plate 15 (original plate not actual size).
16. AY? 1? (AY?). Muḥammad (MHMT). 27.5-29 mm. 3:00. Undamaged. 3.11 g. Goussous collection in the Jordan National Bank Numismatic Museum.
Obverse margin: / *wāfin* /
Plate 16.
17. A? Date? (A?). Muḥammad (MHMT). 27.5-29.5 mm. 3:30. Undamaged. 3.27 g. BM 1977 5-9-1 (Göbl); cited in Sears (1995).
Obverse margin: / *wāfin* /
18. AY? Date? (A?). Muḥammad (MHMT(W)). 25.5-28 mm. 4:00. Undamaged. 3.25 g. Malek collection; cited as private collection (A.D.) in Sears 1995.
Obverse margin: / *wāfin* /
Same obverse die as no. 19 but without pellet triplet in front of crown.
Plate 18.
19. A? Date? (A?). Muḥammad (MHMT(W)). 26-28.5 mm. 3:00. Undamaged. (3.09 g.) Berlin Museum. Nützel (1898: 93 plate II); Walker (1941: 124 no. B.39 plate XXXVII.8); Gaube 1973: table XIV no. 2.2.2.1; cited in Sears (1995).

Obverse margin: / *wāfin* /

Obverse die recut from number 18, adding pellet triplet in front of crown. Plate shows only a corrupt letter A for mint legend, though Walker read it as ZR (currently read YZ). Plate also does not support his suggestion of ČHL, *čihl* ("forty") for date.

Plate 19.

20. A?. Date? (A?). Muḥammad (MHMT). Diameter not recorded. 9:00. Undamaged. (3.22) g. State Historical Museum, inv. no. 91546/477970 V-42015 (ex-P.V. Zubov); mistakenly cited as Hermitage specimen in Sears (1995).

Obverse margin: / *wāfin* /

Pellet triplet appears in front of monarch's bust but partly effaced. Weight was recorded by A. Nikitin.

Plate 20 (not actual size).

Phase 2

21. A? Date? (AS?). Muḥammad (MHMT). Diameter and die axis not recorded. Shaved? (2.86 g). Ex-Timmerman collection, Timmerman (1984: 3); cited in Sears (1995); Sotheby's (2000: 30 no. 183); Baldwin's (2001: 2 no. 1).

Obverse margin: / *Muḥammad* /

Lunate form of the third and fourth strokes in date more closely resemble S than H, though a reading of SH might approximate *syh*, *sih* ("thirty"). Cataloguer for Baldwin's and Arabian Coins & Medals detected traces of *wāfin* under *Muḥammad* in obverse margin.

Plate 21.

22. A. Date? (A?). Muḥammad (MHMT). 27-30 mm. 4:00. Undamaged. 3.41 g. Shamma collection; cited and illustrated as Shamma 2 in Sears (1995: no. 2); Album and Goodwin (2002: plate 34 no. 495).

Obverse margin: / *Muḥammad* /

Plate 22.

MINT C (Harrān?)

Muḥammad Issues (c. 75-78 H/694-97 CE)

All coins imitate Khusrō II's third type except where noted and maintain normal fire altar without pellets at base. Name legend changes from *Khusrō* (HWSRWY) in phase 1 to *Muḥammad* (MHMT) in phase 2.

Phase 1

23. ŠA? 37? (HPTS?). Khusrō (HWSRWY). 27.5-28.5 mm. 4:00. Undamaged. 3.08 g. Malek collection.

Obverse margin: / *Muḥammad* /

Obverse follows Kusrō's second type while reverse follows his third type.

Plate 23.

24. ŠY? 2? (TRYN?). Kusrō (HWSRWY). 28.5-30.5 mm. 3:00. Undamaged. 3.21 g. Ex-Malek collection.

Obverse margin: / *Muḥammad* /

Plate 24.

25. Š. 6? (STA?). Kusrō (HWSRWY). (27) mm. Die axis not recorded. Corroded, Clipped? (2.90 g). Iraq Museum 4075. al-Naqshbandi (1969: 49 no. 15 plate I).

Obverse margin: / *Muḥammad* /

al-Naqshbandi tentatively read date as NWCSH? (NVJH?), *nōčsīh*, "twenty-nine." This may be the same coin mentioned by Gaube (1973: 36, section 2.2.3.6.12).

Plate 25.

26. ŠY? 29? (Writing not recorded). Kusrō (HWSRWY). Diameter, die axis, condition, and weight of coin not recorded. Subhi Pasha collection. Mordtmann (1865: 464, no. 150); Walker (1941: 9 no. M.8).

Obverse margin: / *Muḥammad* /

Walker doubted Mordtmann's reading of the marginal legend as *Muḥammad* considering the epigraphy suspect for this early period. The ligature between the *mīm* and the *hā* was unusual as was the writing of the *dāl*. Yet Walker later found examples of such anomalies on dirhams in the inscription of the name *Muḥammad* no less (1956: 112 no. 268).

Phase 2

27. ŠY? 60? (ŠST?). *Muḥammad* (MHMT). 28-29 mm. 9:00. Undamaged. 2.97 g. Ex-Warden-Album collection. Sotheby's (1985: lot 255); Shams-Eshragh (1990: 90 no. 117); cited and illustrated in Sears 1995 (plate, no. 3).

Obverse margin: / *Muḥammad* /

Other readings may be possible for the date, though it probably represents a corrupt imitation of a date, not an actual one.

Plate 27.

SUPPLEMENTARY PLATES

- A. Georgia, seventh century. W. B. Warden stock, 1993.
 B. Bishāpūr, 66 H, 'Abd al-Malik b. 'Abd Allāh. Ex-Warden-Album collection.
 C. Damascus, 72. Jazzar collection.
 D. Damascus, 73. BN 1965.471.

- E. Damascus, 74. BN 1965.472.
 F. Damascus, 75. BN 1967.208.
 G. Damascus, c. 75. BN 1967.209.
 H. al-Kūfa, c. 73 H. Ex-Warden-Album collection.
 I. al-Kūfa, c. 73 H, Bishr b. Marwān. BN 1968.697.

ACKNOWLEDGMENTS

I would like to acknowledge the generous assistance of Stephen Album, Joe Cribb of The British Museum, Nayef Goussous, Muḥammad S. Jazzar, Mehdi Malek, Alexander Nikitin of the Hermitage Museum, Aman Ur Rahman, the late Samir Shamma, François Thierry de Crussol of the Bibliothèque Nationale, Luke Treadwell of the Ashmolean Museum, the late William B. Warden, and others who wish to remain anonymous for their help in researching this article. I thank The British Museum, The Bibliothèque Nationale, The Hermitage Museum, and The State Historical Museum for permission to publish coins in their collections. A draft of this article was presented at "The Heritage of Sasanian Iran: Dinars, Dirhams and Coppers of the Late Sasanian and Early Muslim Periods", held at Columbia University on 8-9 June 2002 and sponsored by The American Numismatic Society, The Center for Iranian Studies at Columbia, the Middle East Institute at Columbia University, and The Middle East Medievalists. An ACLS/SSRC/NEH International and Area Studies Fellowship helped support the final write-up and revision of this work.

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BM = The British Museum. London, UK

BN = Bibliothèque Nationale. Paris, France

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SHM = State Historical Museum. Moscow, Russia

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GEORGE WASHINGTON AND AMERICA'S "SMALL BEGINNING" IN COINAGE: THE FABLED 1792 HALF DISMES

JOEL J. OROSZ* AND CARL R. HERKOWITZ**

Historical truth is fragile; historical error is all but immortal. In 1943, when a memorandum was discovered claiming that President George Washington was the source of the bullion used to strike the first coins produced by the fledgling United States Mint at Philadelphia, an error in attributing the memorandum's authorship was made that has taken on a life of its own from repeated citations by subsequent scholars. This error was corrected by one of the authors of this paper (Herkowitz) in 1996, but at that time, nothing was known of the memorandum's true author except for his name. Subsequent research, however, has revealed that John A. McAllister, Jr., the author of that pivotal document, was a multifaceted man. This article will, for the first time, provide an account of McAllister, the numismatist, and also for the first time, systematically weigh the evidence as to whether the McAllister memorandum is correct: did the first President of the United States personally supply the bullion used to strike the first coins issued by the United States Mint?

A MISATTRIBUTION CORRECTED

In order to lay the misattribution of authorship to rest once and for all, it is necessary to begin by recounting a sensational bookstore find by Edward B. Haden, an unsung member of the American Numismatic Association. Mr. Haden shared news of his discovery in a letter to the editor published in the May 1943 issue of *The Numismatist* (Haden 1943: 343):

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** 13319 North Norfolk, Detroit, MI 48235, USA.

Haddonfield, N.J., April 6, 1943

To the Editor:

Several weeks ago I stopped in Leary's Book Store in Philadelphia. Leary's is well known in this section for second hand books. The purpose of my visit was to try and find some books dealing with United States Coins. I was unsuccessful, but did notice quite a few books dating back to the eighteenth century dealing with numismatics; these books dealt with European coinage and about half of them were printed in German.

Just by chance I happened to notice a notation on a piece of paper that had been glued in the fly leaf of one of these books. The information it contained I thought might be of interest to other numismatists so I copied it down and am now forwarding it to you, with the thought that perhaps it might be worthy of mention in *The Numismatist*.

Following is a copy exactly as it was penned in the book:

Half Disme

Obverse—A Head—1792—Liberty Parent of Science and Industry

Reverse—Flying Eagle—Half Disme—United States of America

In conversation with Mr. Adam Eckfeldt today at the mint, he informed me that the Half Dismes above described were struck at the request of Gen. Washington to the extent of one hundred dollars which sum he deposited in bullion or specie—for that purpose—Mr. Eckfeldt thinks that Gen. Washington distributed them as presents—some were sent to Europe but the greater number of them he believes, were given to acquaintances in Virginia. No more of them were coined except those for Gen. Washington. They were never designed as currency—the mint was not at the time fully ready for going into operation. The coining machinery was in the cellar of Mr. Harper's sawmaker at the corner of Cherry and Sixth Streets, at which place these pieces were struck.

April 9, 1844

I. McAllister.

I do not have any knowledge who Mr. McAllister might have been, or how the notation happened to be there. I just happened to see it and thought, as I said before, that other numismatists might like to know about the Half Dismes.

—Edward B. Haden¹

1. Leary's Bookstore was the site of an even more momentous find twenty-five years after that of Haden: the sixteenth of twenty-five known copies of John Dunlap's first printing of the Declaration of Independence was discovered on Leary's shelves by two Texans. It is on



FIGURE 1. The 1792 half dime (ANS 1932.51.38).



FIGURE 2. Adam Eckfeldt: medallion depiction by Furst (ANS 1956.177.3).

Haden's discovery at Leary's Book Store did not introduce the connection between George Washington and the 1792 half dismes (see Fig. 1 for an example) to numismatists. Indeed, as we shall see, the first such mention in print had been made nearly a century before, in 1846, and the story had been repeated (and distorted) so many times in subsequent years that it has the quality of a tall tale. Haden's find, however, was significant in that it was the first to identify a specific source for the story, and an impeccable one at that. In 1844, when the memorandum had been written, Adam Eckfeldt was the United States Mint's Nestor; full of years and honors, the retired Chief Coiner was highly respected (Fig. 2). In 1792, when the half dismes were struck, he was on the spot as a new contractor for the infant United States Mint. Thus, the memorandum Haden discovered gave credence to a century's worth of tradition. Although Haden's discovery solved one mystery, it created others. Who was the "I. McAllister" who had written and signed the memorandum? Had he been in a position to know Adam Eckfeldt? Might this McAllister have fabricated the story?

permanent display in the Dallas Public Library, the only Dunlap printing of the Declaration west of the Mississippi.

A Philadelphia numismatist, Charles McSorley, Jr., was among those whose curiosity was piqued, and in a letter to the editor published in the July 1943 edition of *The Numismatist*, he shared the results of his own investigation (McSorley 1943: 527):

To the Editor:

Being a frequent visitor to "Leary's" myself I immediately recognized the notes on the "Half Disme" as discovered by Edward B. Haden and printed in the May issue of *The Numismatist*. Dated April 9, 1844, these notes are signed in faded, hardly legible brown ink, J—Mc—; someone obviously trying to identify the author has written in pencil "I. McAllister." But after a little study of the other notes in the front of the book, [I find] the original author was Jonas R. McClintock. According to the "History of the U. S. Mint" by Evans, he was an officer and refiner in the Mint during the middle of the last century, and a good friend of Adam Eckfeldt, the Chief Coiner, and who as a boy in 1792 helped forge the dies for the "Half Disme."

I hope this will answer Mr. Haden's query as to the author of the only accurate unofficial statement of the Mint on those mysterious half dismes of General Washington.

—Charles McSorley, Jr.

2645 North 5th Street, Philadelphia, Pa²

Haden had copied the inscription but had not purchased the European numismatic book itself, which allowed McSorley to go to Leary's and examine the tipped-in memorandum. As noted by McSorley, it appears that the "J. Mc." signature on the memorandum was sufficiently faded that Haden had failed to notice it while transcribing, seeing only the penciled in "I. McAllister." McSorley, who went on to distinguish himself in the area of presidential campaign medals, in 1943 inadvertently demonstrated the truth of Alexander Pope's aphorism, "A little learning is a dangerous thing" and misattributed authorship to Jonas McClintock, a mistake that went unchallenged for 53 years.

Like everyone else in the numismatic world of 1943, McSorley had never heard of "I. McAllister" so he assumed the penciled notation was an erroneous speculation. However, on the authority of George G. Evans' *History of the United States Mint*, he knew that Jonas McClintock was the melter and refiner at the United States Mint at Philadelphia in 1844, and, McSorley claimed, a friend of Adam

2. The "other notes in the front of the book" passage likely refers to the tipped-in memorandum, not to any notes actually printed in the book itself. Interestingly, neither Haden nor McSorley noted the title of the book into which the memorandum was tipped. The identity of the person who penciled in "I. McAllister" is unknown. McSorley erred in calling Eckfeldt a "boy" for in 1792 he was 23 years old.

Eckfeldt (Evans 1886: 112).³ So the “J Mc” must have been Jonas McClintock. It appears that Mr. McSorley did not buy the European numismatic book either, so what became of this volume with its tipped-in memorandum?

The answer is implied in J. Hewitt Judd’s *United States Pattern, Experimental and Trial Pieces*, in which Dr. Judd states: “The story that these pieces [1792 half dismes] were struck from silver furnished by President Washington has recently been verified by a document dated April 9, 1844, acquired by Mr. Walter Breen” (Judd 1959: 9).

What Dr. Judd implied in 1959, Don Taxay explicitly stated seven years later. Writing about the 1792 half dime, Taxay asserts: “Details of this historic issue are provided by a memorandum of Dr. Jonas McClintock, which is now in the possession of Walter Breen” (Taxay 1966: 72). Taxay elaborates in a note: “This letter was discovered by Edward B. Haden, and published in the letters-to-the-editor column of *The Numismatist*, May 1943; the ‘J. Mc’ was correctly identified by Charles McSorley in the same column of *The Numismatist*, July 1943; the letter itself was illustrated for the first time by Walter Breen in the April 20, 1962 edition of *Coin World*, p. 82” (Taxay 1966: 72). Before considering that important publication of the memorandum in *Coin World*, it is necessary to add two further citations on this subject. According to Andrew W. Pollock III, in *United States Patterns and Related Issues*, “This document was in the possession of the late Walter Breen, having been acquired by him in the 1950s by purchase from the Rev. Edward W. W. Lewis” (Pollock 1994: 13). An inscribed copy of Breen’s monograph, “The United States Patterns of 1792”, allows us to determine the approximate date at which Breen purchased the memorandum. He does not mention it in the monograph itself, which was published in the March-April 1954 issue of *The Coin Collector’s Journal*. Breen’s inscription to Mike Powills is dated September 1956 and includes a tipped-in typescript of the memorandum with the following notation on the bottom: “Could one ask for more striking confirmation? This document found after monograph appeared” (Breen 1954: 21).

By the authority, then, of Judd, Taxay, and Pollock, it seemed clear that the European coin book with the tipped-in memorandum that both Haden and McSorley had viewed at Leary’s Book Store in Philadelphia had come into the possession of Rev. Edward W. W. Lewis, a Congregational clergyman from New England,

3. Evans notes that Jonas R. McClintock was appointed Melter and Refiner on 19 February 1840 but makes no mention of a friendship between McClintock and Adam Eckfeldt. George G. Evans was a Philadelphia bookseller, not known to be either a numismatist or a scholar of Mint history; his name was affixed to the title page of various editions of the *Illustrated History of the United States Mint*, but much of the text and many of the illustrations were borrowed from other sources.

who sold it to the great polymath and scholarly coin cataloguer Walter Breen. This was a reasonable inference on Taxay's part, and it can be confirmed or refuted by comparing the text as copied by Haden with the text appearing in the *Coin World* illustration published on 20 April 1962.

The *Coin World* illustration, fortunately, is clear enough so that the text can be read closely. This memorandum reads as follows (Breen 1962: 82):

On one side – a head – 1792 – Lib Par of Science + Industry

On the other side – Eagle flying – Half Disme – United States of America

In conversation with Mr. Adam Eckfeldt today at the Mint he informed me that the Half Dismes above described were struck at the request of Gen. Washington to the extent of One Hundred Dollars, which sum he deposited in bullion or specie – for that purpose – Mr. E. thinks that Gen. W. distributed them as presents – some were sent to Europe but the greater number of them, he believes, were given to acquaintances in Virginia – No more of them were ~~struck~~ coined except those for Gen. W. – they were never designed as Currency – the Mint was not at the time fully ready for going into operation – the coining machinery was in the cellar of Mr. Harper's ~~coach-shop~~ saw maker at the corner of Cherry and 6th Streets, at which place these pieces were struck.

April 9, 1844

J. Mc.

A comparative reading of this document and the Haden transcription published in *The Numismatist* (which Haden took care to "copy exactly as it was penned in the book") reveals a number of striking inconsistencies. For one thing, the memorandum in the *Coin World* illustration is not pasted into a book, although two areas of paper loss at the top suggest that it may once have been tipped into a book and later removed. The conclusive discrepancies, however, lie in the texts. The Haden transcription is headed "Half Disme" and the description begins with "Obverse" and "Reverse". The Breen copy has no header, and the text begins with "on one side" and "on the other side". The Breen copy also exhibits two corrections that do not appear in the Haden transcription. The word "struck" is crossed off and replaced by "coined" and "coach shop" is crossed off and replaced by "saw maker". Both of the amendments in the Breen copy were used, without corrections, on the Haden transcription. Finally, the "J. Mc" signature on the Breen copy is bold, not faded, and the Breen copy lacks the penciled "I. McAllister" that was in evidence in the Haden transcription.

The conclusion is inescapable. While Taxay was aware of the Haden transcription and the Breen copy, he never compared the two texts side-by-side. He assumed that Breen possessed the same document that Haden and McSorley had seen in the European numismatic book at Leary's. Neither did anyone else compare

the two texts, and everyone who considered the matter jumped to the same conclusion. The fact that there were two distinct documents—Haden/McSorley and Breen—went utterly unnoticed until 1995.

In that year, Craig W. Whitford, a Lansing, Michigan, numismatic auctioneer, held a mail-bid sale entitled “Archive Collection of U. S. Mint Memorabilia”. Unbeknownst to anyone at the time, lot 268 in that sale was yet a third version of the memorandum, one that was quite different from the other two. One of the authors of this article, Carl Herkowitz, purchased this lot and launched a study of the three memoranda that led to the publication of “The Mystery of ‘J. Mc’ and the Eckfeldt Memo” in *The Numismatist* in June of 1996. In that article, Herkowitz revealed the existence of the three separate versions of the memorandum, established that the true author of the memorandum was not Jonas McClintock but rather John McAllister, Jr., and published the full text of the finished memorandum (Herkowitz 1996):

Description of Half Dismes coined in 1792

On one side = a Head = 1792 = Lib. Par. of Science and Industry—

On the other side = an Eagle Flying = Half Disme = United States of America—

In conversation with Mr. Adam Eckfeldt (Apr 9, 1844) at the Mint, he informed me that the Half Dismes above described, were struck, expressly for Gen. Washington, to the extent of One Hundred Dollars, which sum he deposited in Bullion or Coin, for the purpose. Mr. E. thinks that Gen. W. distributed them as presents. Some were sent to Europe, but the greater number, he believes, were given to friends of Gen. W. in Virginia. No more of them were ever coined. They were never designed as Currency. The Mint was not, at the time, fully ready for being put into operation. The Coining Machinery was in the cellar of Mr. Harper, saw maker, at the corner of Cherry and 6th Sts, at which place these pieces were struck.

John McAllister, Jr.

Philadelphia⁴

The Herkowitz version of the memorandum (Fig. 3) clearly differs from the Haden/McSorley and Breen versions. Not only is the Herkowitz version headed “Description of Half Dismes Coined in 1792”, it is the only version that carries a full autograph: boldly signed “John McAllister, Jr., Philadelphia.” It is also evident

4. In the article by Herkowitz (1996), the Breen copy is pictured on p. 690 and the Herkowitz copy on p. 710. These illustrations are clear enough to demonstrate that both documents were written in the same hand, and the authors have been able to verify, through comparisons to McAllister’s signed letters in the William Young Papers at the William L. Clements Library at the University of Michigan, that both documents were written by John A. McAllister, Jr.

Description of Half Disme coins in 1792.

On one side = 1 Head = 1792 = Lib. Par. of science and industry -
 On the other side = an Eagle flying = Half Disme = United States of America.

In conversation with Mr Adam Eckfeldt (Apr 9. 1844) at the Mint, he informed me that the Half Disme above described, were struck, expressly for Gen. Washington, to the extent of One Hundred Dollars, which sum he deposited in Bullion or Coin, for the purpose. Mr E. thinks that Gen. W. distributed them as presents. Some were sent to Europe, but the greater number, he believes, were given to friends of Gen. W. in Virginia. No more of them were ever coined. They were never designed as currency. The Mint was not, at the time, fully ready for being put into operation. The Coining Machinery was in the Cellar of Mr Harper, Saw maker, in the corner of Cherry and 6th Sts, in which place these pieces were struck.

John McAllister }
 Philadelphia

FIGURE 3. The Herkowitz copy of the McAllister memorandum.

that the Haden/McSorley and Breen versions of the memorandum have the rough wording of drafts while the Herkowitz version has the polished wording of a final document. As significant as the Herkowitz discovery was—indeed, the Herkowitz article is the basic source for the story recounted up to this point—it brought us

back to the conundrum raised by Edward Haden in 1943 and thought to have been solved by Charles McSorley, Jr., a couple of months later: who was John McAllister, Jr.? He seemed to have left no mark on the numismatic world other than these three memoranda—he had written no books, he was not associated with a named auction sale of coins, he was absent from coin lore—in short, he was a total cipher. Herkowitz consulted Philadelphia city directories for the time period, only to discover twenty-three John McAllisters residing in Philadelphia. So, Herkowitz closed his article by noting, “and a resultant mystery now beckons those who wish to take up that most worthy search for *the* John McAllister . . .” (Herkowitz 1996: 711).

When Herkowitz wrote these words in 1996, the Internet was only in its infancy as a publicly available research tool. In the intervening years, its development has made it a much simpler matter to find biographical information about long-departed numismatists. The authors have used Internet sources that led to primary sources that in turn have opened up a wealth of biographical and numismatic information about John A. McAllister, Jr., the author of all three memoranda. These data allow us not only to fill in the gaps about McAllister himself, but also to make informed judgments about the likely veracity of the facts asserted in his memoranda.

JOHN A. McALLISTER, JR.

John A. McAllister, Jr., was born in Philadelphia on 19 June 1786, the son of John A. and Frances Wardale Lieber McAllister. The couple also had twin daughters, born in 1784. The elder McAllister had emigrated from Scotland to New York City in 1775 and moved to Philadelphia in 1784, where he went into business manufacturing whips and canes. In 1799, he purchased an “eyeglass manufactory” which he added to his other product lines (Background note, Young Papers).⁵

Young John proved to be a prodigy. In this era before public schools, it was not unusual for students to commence university studies at the age of fifteen or sixteen, but John Jr. enrolled in the University of Pennsylvania at the remarkably young age of ten. It is significant to note that his mathematics professor was Robert Patterson, who would later be appointed the fourth Director of the United States Mint (Draft biography of John A. McAllister, Jr., p. 13, Young Papers). McAllister completed his bachelor’s degree just before his seventeenth birthday, and at the time of his death nearly three quarters of a century later, he proudly claimed to be the university’s oldest living graduate (Background note, Young Papers).

5. William Young was the junior McAllister’s father-in-law, and many of McAllister’s papers reside in the Young collection. The Background Note, which can be found on the Internet at <http://www.clements.umich.edu/Webguides/UZ/Young.html> (28 November 2002), provides an excellent short biography of McAllister.

After a few years spent working for other companies and traveling, John Jr. joined his father's business in 1807. McAllister & Son quickly grew to eminence in the optical field. Thomas Jefferson's embargo on European goods during the Napoleonic wars created an opening for the McAllister firm to expand their business. Under John Jr.'s vigorous leadership, they seized the opportunity. Soon such luminaries as Jefferson, Andrew Jackson, Henry Clay, and even Napoleon's brother, Joseph Bonaparte, were wearing McAllister spectacles (Graver 1971: 2–3). Moreover, the McAllisters were the American pioneers in the manufacture of cylindrical lenses to correct ocular astigmatism. In 1829, John Jr. diagnosed and corrected ocular astigmatism in Rev. Chauncey E. Goodrich, the earliest such documented case (Bruneni n.d.). Forty more years would pass before American oculists would routinely make such corrections. Upon the senior McAllister's death in 1830, the thriving family concern was renamed John McAllister & Company.

John A. McAllister, Jr.'s success in business was mirrored by his success in the domestic sphere, for in 1811 he married Eliza Melville Young (1790–1853), a childhood playmate whose father, William Young, was also a good friend of the elder McAllister. Individual portraits of the young couple were painted in 1813 by James Peale (1749–1831), a renowned miniaturist and brother of the celebrated artist and museum proprietor Charles Willson Peale (1741–1827) (Letter to Agnes Young Craig, 1 February 1813, Young Papers). No fewer than ten children were born to this union, the eldest of whom, William Young McAllister, succeeded his father at the helm of John McAllister & Company in 1835. Retired before the age of fifty, John A. McAllister, Jr., became a leisured gentleman with a consuming interest in history. As the Clements Library "Background Note" puts it: "A member of the Historical Society of Pennsylvania since 1828, he was one of Philadelphia's most notable antiquarians, whose research shows a careful weighing of the evidence and attention to detail" (Background note, Young Papers). One of his historical interests was writing biographies of prominent American churchmen, and he contributed several entries on Associate Presbyterian and Episcopal clergy to William B. Sprague's *Annals of the American Pulpit*. Another of McAllister's interests, as we shall see, was numismatics.⁶

Having made history as a manufacturing optician, McAllister achieved another notable first on the other side of the lens: he was the earliest documented person in the United States to patronize a commercial photography studio. The place was Robert Cornelius' Daguerrian Gallery at the southeast corner of Lodge (later Taylor) Street and South Eighth Street in Philadelphia. The date was 6 May 1840; as McAllister recollected, he called on Cornelius that afternoon to inform

6. McAllister was acquainted with many of Philadelphia's numismatic notables. In the Young Papers at the Clements Library are letters to McAllister from Samuel Breck (1771–1862), author of *Continental Paper Money*, and Robert Coulton Davis (c. 1813–1888), apothecary and prominent coin collector.

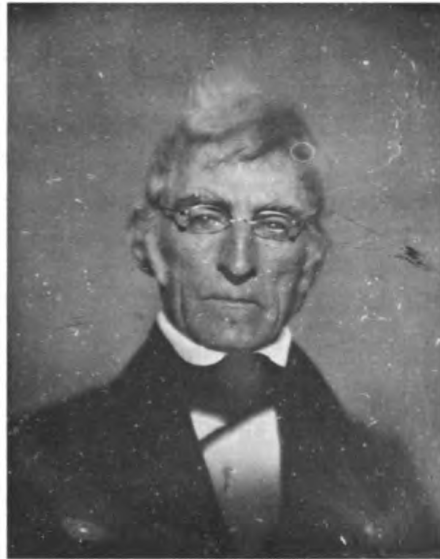


Figure 2. John A. McAllister, Jr. (daguerreotype by Robert Cornelius, 1840).

the photographer that he intended to arrive very early the next morning so that he could be Cornelius' first paying customer. McAllister later recalled the historic moment: "'Well,' said he, 'I have all ready and if you will sit down I will take it now.' To this I readily agreed" (Letter to Paul R. Goddard, 5 March 1864, Library of Congress). The resulting sixth-plate daguerreotype is a frontal view of McAllister, wearing a suit and a pair of McAllister spectacles (Fig. 4).⁷

Yet another McAllister claim to historical fame was his work in 1858 to simplify and rationalize the chaotic system of numbering Philadelphia's streets. Operating out of his home, "Retsilla" ("Allister" spelled backwards) at 194 Chestnut Street (Library Company of Philadelphia n.d.), McAllister devised a new system of building numbering for Philadelphia that has subsequently been widely adopted throughout the Western world (Graver and Graver 1971: 3).⁸

Eliza McAllister passed away in 1853. John A. McAllister, Jr., lived on nearly a quarter century more, dying on 17 December 1877. He exited this world a

7. This photograph currently resides in the Prints and Photographs Division of the Library of Congress (<http://www.loc.gov/exhibits/treasures/trro87.html>) (28 November 2002). Research done by Nicholas M. Graver indicates that Cornelius was not the first in the United States to open a Daguerreian photography studio (there was an earlier studio in New York City). McAllister remains, however, the earliest documented paying sitter. Moreover, Cornelius had purchased the lens used in his camera from the McAllister firm (see Welling 1978: 11). A daguerreotype of the John McAllister & Co. building as it appeared in 1843 was published in the book *Old Philadelphia in Early Photographs* (Looney 1976: 121).

8. McAllister has also been credited by some as the coiner of the word "telegram" (Bowers 1998: 54).

wealthy man in every way: materially; in terms of descendants—he left five living children, fourteen grandchildren, and numerous great-grandchildren—and especially in terms of the respect in which he was held. A letter of condolence to McAllister's son John Allister McAllister eloquently summarized the feelings of his contemporaries: "Full of years, he has died the death of the Righteous, leaving to his descendants the honor of a venerable name" (Letter from Thomas Harris Montgomery, 19 December 1877, Young Papers).

MCALLISTER AND NUMISMATICS

The numismatic career of John A. McAllister, Jr., was a very long one. In the possession of one of the authors (Orosz) is a remarkable clipping archive, begun in March of 1826, in which McAllister saved articles published in the Philadelphia newspapers on all aspects of coinage and operations of the United States Mint. In the early years, McAllister seems to have clipped only episodically, but beginning in 1848 he appears to have become systematic in his newsgathering. From 1849 through 1857—with the exception of 1851—envelopes labeled by year hold the clippings. In this one-of-a-kind archive he saved a total of 126 clippings plus letters and pamphlets. One of these letters hints as to why the collection of clippings came to an end with 1857. On 27 January 1858, McAllister wrote to one Daniel M. Keim:

I frequently cut out of the newspapers articles, having reference to coins and particularly to those of the U. States—These cuttings I have arranged to different years generally, and put them into envelopes for each year—Last evening, I had occasion to look for something among them, and it then occurred to me that you might find something which would be of service in your investigations—I therefore send the whole of these herewith.⁹

McAllister goes on to say, "It may be well for you to have the opportunity of seeing all the articles—You need not be in any hurry to return them—Take your own time—" (McAllister 1858).

Mr. Keim did take his own time, and apparently never returned the archive to McAllister. What matters most about this archive, however, is that it establishes McAllister's interest in United States coinage as early as 1826. Further, the very act of creating the archive demonstrates McAllister's desire to document numismatics, and his letter to Keim proves that he conceived of this archive as a resource for

9. Clipping Archive, Library of Joel J. Orosz. The handwriting in this letter, including the signature, closely matches that of both the Breen and the Herkowitz versions of the memorandum. The authors have been able to discover little about this early numismatic researcher other than a letter in the William Young Papers at the Clements Library from Keim to McAllister dated 20 April 1859 about the starting point of the Mason-Dixon Line survey. A Daniel M. Keim was a captain in the Washington Grays Pennsylvania State Militia Regiment and was succeeded in 1837 by his cousin William H. Keim (Young Papers; Montgomery n.d.).

scholars wanting accurate information about United States coinage.

We also get glimpses of McAllister's numismatic career by examining items from his library, now residing in the collection of the Library Company of Philadelphia. For example, the Library Company has a copy of the 1851 auction sale catalogue of Dr. Lewis Roper that is boldly signed on the cover by McAllister.¹⁰ His numismatic interest continued at least through 1870, for the Library Company owns another McAllister-autographed coin sale catalogue, this one for the estate of James B. Longacre, the recently deceased former Chief Engraver of the United States Mint.¹¹

In spite of his long journey through the cradle era of American numismatics, McAllister left but few tantalizing footprints. This is largely because he is not known to have published anything on a numismatic topic, nor did his coin collection go to an auctioneer for a public sale. While it is true that Emmanuel Attinelli in *Numisgraphics* lists "J. McAllister" as the consignor to a 24 September 1873 auction sale by Leavitt in New York City, in a note Attinelli states, "This collection belonged to the above-named gentleman, more familiarly known to the American people as the 'Wizard of the North' from his feats of prestidigitation. . . ."¹² We have discovered the immediate fate of McAllister's coin collection. His last will and testament, dated 30 March 1876, a copy of which resides in the William Young Papers at the Clements Library, contains fourteen provisions. The thirteenth reads as follows:

All the rest, residue and remainder of my estate . . . including my watches, jewelry, prints, portraits, coins, books & c. . . . I direct shall be divided by my Executors into six equal parts or shares, and I give, devise and bequeath one of said equal parts or shares to each of my five children, to wit: William Y. McAllister, Frances W. Bruce, Agnes Y. McAllister, John A. McAllister and Thomas H. McAllister . . . and the other of the said equal parts or shares I give, devise and bequeath to my grand daughters Elizette M. Grant and Jessie M. Grant [the children of McAllister's daughter Sarah, who lived from 1819 to 1870] . . .

10. Library Company of Philadelphia, catalog number Wv*.39 1851. This copy is completely priced in brown ink, suggesting that McAllister may have been in attendance at the first auction sale in the United States that consisted primarily of coins, on 20–21 February 1851. However, a priced and named copy of the catalog in the possession of P. Scott Rubin does not record McAllister as a buyer of any lots at the sale. The signature on the cover closely matches that of McAllister on the Herkowitz copy of the memorandum.

11. Library Company of Philadelphia, catalog number Wv*.39 1870. The signature on the cover closely matches that of McAllister on the Herkowitz version of the memorandum.

12. John Henry Anderson, a Scottish magician (died 3 February 1874), worked under the stage name of the "Great Wizard of the North" (Gillon n.d.), but the "Wizard of the North" mentioned by Attinelli was clearly a Mr. J. McAllister, who may have been an American magician who had appropriated Anderson's billing style.

Further evidence of the disposition of the coins comes from another document in the Young Papers, a "Statement of Proceeds or Disposition of the Residuary Estate," in which item 11 states, "Library, coins, pictures, jewellery [*sic*] watches &c. have been divided equally among the heirs." The final glimpse we have of the collection also gives a hint as to how it may have been disposed of by the seven heirs. A document in the Young Papers recording bills paid by McAllister's estate includes this entry: "May 25, 1878 J. W. Haseltine for valuation of coins &c. \$25.00" (J. McAllister, Jr., Est. Bills Paid Since April 1, 1878, Young Papers).¹³ Therefore, it seems likely that Philadelphia coin dealer John W. Haseltine was the conduit through which the heirs liquidated their shares of McAllister's coin collection. Haseltine did not name any of the heirs as consignors to any of his public auctions during that period, which means that if any of the heirs did sell via auction, they demanded anonymity. Alternatively, the coins may have been dispersed by means of private sales.

As a result of this quiet method of liquidating his collection, then, the memory of John A. McAllister, Jr., rapidly faded from the numismatic scene after his death at the end of 1877. By the time Edward B. Haden discovered one version of the McAllister memorandum in 1943, the name "I. McAllister" did not elicit recognition from anyone in the field. This, of course, led directly to the misidentification of Jonas McClintock as the author of the memorandum.

ECKFELDT AND McALLISTER: RELIABLE WITNESSES?

Now that we have corrected past errors and shared a biography of McAllister, three important questions need to be answered: Can we trust Adam Eckfeldt as an eyewitness? Can we trust John A. McAllister, Jr., as a chronicler? And can we therefore rely on the claim that George Washington provided the bullion or coin from which the 1792 half dismes were struck? We can dispose of the first two questions in short order.

Adam Eckfeldt (1769–1852) was widely admired for his probity both within the Mint and without it. For example, George Escol Sellers recalled: "Mr. Eckfeldt was a man of staunch integrity, a cautious, careful, orderly, painstaking man . . ." (Ferguson 1965: 70). Noted collector Joseph J. Mickley, in his diary for 1852, referred to Eckfeldt as ". . . a man of unblemished character, beloved by every one of his acquaintances for his integrity, his mild & amiable disposition, his death is universally regretted" (Orosz 2001: 96). Adam Eckfeldt simply wasn't the kind of man given to spinning colorful yarns to gull the credulous. Further support for that statement lies in the fact that the association of George Washington with the 1792 half dismes is the only such story from the early days of the United States

13. In 1878, \$25 would have been a very large appraisal fee, suggesting that McAllister possessed a significant coin collection.

Mint. If this association was based upon an Eckfeldt “whopper” one might reasonably expect that there would be other such tall tales. It strains credulity to believe that in an otherwise sober and industrious forty-six-year career at the Mint and in another thirteen as a volunteer, that Adam Eckfeldt would spin one and only one fanciful yarn. Based on the testimony of “character witnesses” and the absence of evidence of unreliability, then, it seems that Eckfeldt can be counted a credible source.

What of McAllister? After his death, on 14 January 1878, Charles M. Morris read a memorial notice to the Historical Society of Pennsylvania, of which both McAllister and Morris were members. Morris noted:

Of later days—after his retirement from business—as he grew older, and as his mind fed upon his recollections, his tastes led him much into the subject of our local antiquities; and his collection of ancient pamphlets, newspapers, maps, and manuscripts being large and well-arranged, his memory clear, and his judgments both moral and intellectual sound, he was continually applied to for information about men, things, and events of former days in Philadelphia (Young Papers).

The biographies of ministers and priests that McAllister contributed to William B. Sprague’s *Annals of the American Pulpit* are models of carefully sourced historical writing. Like Eckfeldt, McAllister also left no evidence of any tendency to create or repeat tall tales. In short, both Eckfeldt and McAllister seem to have been serious and trustworthy men.

Given that both Eckfeldt and McAllister were honorable men, it seems at first blush surprising that neither man signed the U.S. Mint’s visitor’s register for 9 April 1844 (U. S. Mint, Visitor’s Register, 1839–48, Record 158). Although technically both should have done so (Eckfeldt was five years retired by 1844, and McAllister never had been an employee), it is hardly surprising that neither man did. In organizations then, as now, mandatory sign-in rules are often honored more in the breach than in the observance by long-time employees and frequent visitors. For example, although many sources document that Adam Eckfeldt continued regularly to come to the Mint as a volunteer between his retirement in 1839 and his death in 1852,¹⁴ research done by Karl Moulton indicates that Eckfeldt signed the visitor’s register exactly once during this time period, on 7 October 1850 (Moulton 2003). It seems highly natural that a man who had been a forty-seven-year employee and was currently a daily five-year volunteer would not be put through the formal requirement of signing the visitor’s register. But what of McAllister, who had been neither an employee nor a volunteer? By all appearances, he was such a

14. See for example, Don Taxay (1966: 183): “Coining operations had not been interfered with because they were daily attended to by Adam Eckfeldt who, despite his retirement, continued to faithfully perform the work. Eckfeldt served as gratuitous chief coiner until only a few days before his death in 1852.”

regular visitor that he, too, was no longer required to sign in. Or more likely perhaps is that he arrived with Adam Eckfeldt on that day and was waved in with the retired Chief Coiner.

At any rate, 9 April 1844 was not the only day that McAllister visited with Adam Eckfeldt at the Mint. In the October 1857 issue of the *Historical Magazine*, McAllister shares an 1843 clipping from the *Pittsburgh Morning Chronicle* on the subject of the Washington cents of 1791. Ironically, the author of the article that comprised the clipping was none other than Jonas R. McClintock, the man erroneously pegged by McSorley as the author of the McAllister memorandum. McAllister wrote the introduction to the McClintock article under his pen name, "Retsilla", and vouches for the accuracy of the article by asserting, "Full reliance may be placed in the facts stated: They were furnished to Dr. McC, by the venerable Adam Eckfeldt, a most estimable gentleman, who had been engaged in the construction of the first machinery for the Mint . . ." (McAllister 1857: 303).¹⁵ "Retsilla" goes on to say:

After his [Eckfeldt's] retirement from duty, and until his decease in 1852, he passed the most of his time at the Mint, in which a room was allotted to his use. In that room I have passed many pleasant hours with him in interesting conversations about the early operations of the Mint, as well as about matters of the "olden time" generally, of all which his recollections were very clear. Mr. Eckfeldt had reserved a few of these Washington Cents. The one which I possess was kindly presented to me by him several years before his decease (McAllister 1857: 303).

Nor was McAllister the only numismatist who heard the story related in the memorandum from Adam Eckfeldt. In September 1861 the *Historical Magazine* reprinted an article from the *Philadelphia Evening Bulletin* that was partly cribbed from the recently-published *Mint Manual* by James Ross Snowden (Snowden 1860: 98–100) and partly original. One of the original paragraphs read:

John Harper, an extensive manufacturer of saws, at the corner of Sixth and Cherry Streets, caused dies to be made under the direction of Robert Birch. Most of the original Washington Cent pieces were struck from these dies. The coins of 1791 were made in the cellar of Mr. Harper's shop, on a press which it is supposed was imported from England. The coins of 1792 were struck on a press which was set up in an old coach-house in Sixth-Street above Chestnut, directly opposite Jayne-Street. This last described press was made by Adam Eckfeldt, for many years the chief coiner of the National Mint (Past and present 1861: 277).

15. The 1791 Washington cents were engraved by John Gregory Hancock, Sr., and struck in Great Britain as samples for a proposed contract coinage for the United States. George Washington is said to have found them "too monarchical", and the House of Representatives had decided in January 1791 that the image of the President should not appear on the nation's coinage (Goodwin 2003: 112–113).

After quoting this paragraph from the *Philadelphia Evening Bulletin* in his *The United States Coinage of 1793*, Sylvester Sage Crosby notes, "This account is confirmed by a letter received by me, 1874, from the late Jos. J. Mickley, of Philadelphia, who says a similar statement was made to him by Adam Eckfeldt, who was present and witnessed the coinage of some of these pieces" (Crosby 1897: 6).¹⁶

Mickley's letter to Crosby suggests that Eckfeldt told the same story to both McAllister and Mickley, and the paragraph from the *Philadelphia Evening Bulletin* sheds some light on the correction made in the Breen copy of the McAllister memorandum in which "coach shop" is struck out and replaced by "saw maker". Given the fact that Herkowitz's final copy of the memorandum unambiguously states that the half dismes were coined in the cellar of John Harper, Saw Maker, and given the fact that Walter Breen (1954: 13) came independently to the same conclusion without yet having seen the memorandum, it seems most probable that Harper's cellar was the place.¹⁷

WASHINGTON AND THE 1792 HALF DISMES IN PRINT, 1846–1971

Given that Eckfeldt was a reliable witness and McAllister was a careful chronicler, and further given that Joseph J. Mickley corroborated the McAllister memorandum, it would seem that the third question is all but answered. Surely, we can rely upon the truth of the assertion that Washington provided the bullion from which the 1792 half dismes were struck. Yet, even the most honest of men might be betrayed by their memories of long-ago events, particularly when those events were more than half a century in the past. It is prudent, therefore, to test that memory. An instructive way to do so is to trace the history of the association of Washington with the 1792 half dime as it has appeared in print over the years.

Although the first copy of the McAllister memorandum was not discovered until 1943 and apparently was unknown to numismatists before that date, the gist of the story that it told was already common knowledge among coin hobbyists. Since the account had never been tied to a single source, however, it was more in the form of lore than of solid knowledge. Tracing the evolution of this lore uncovers some curiosities. The authors can find no evidence of the story in print prior to the 9 April 1844 date of the McAllister memorandum. Although the

16. As mentioned in n. 15, the Washington cents of 1791 were struck in Britain. The error in the *Evening Bulletin* account was probably introduced by Snowden or more likely Eckfeldt's son-in-law, William Du Bois. Eckfeldt, in his statement to Mickley, was likely referring to the coins of 1792, which he did witness being struck.

17. In point of fact, in 1792 John Harper had coining equipment at both his cellar at Sixth and Cherry and in the coach shop at Sixth above Chestnut. Given the fact that the same man was associated with both locations and that the addresses were similar, it is no wonder that the article in the *Philadelphia Evening Bulletin* got the location wrong and that McAllister had to correct the location in the Breen copy of the memorandum from "coach shop" to "saw maker".

memorandum was apparently unknown until 1943, and the final form was not uncovered until more than 150 years after it was created, yet the story recounted in the memorandum appears time and again in print starting in 1846. Only the first of these accounts appeared during Adam Eckfeldt's lifetime, and it is true to the version presented in the McAllister memorandum. The next account, published a year after Eckfeldt's death, also conforms to the McAllister memorandum. The veracity of the accounts published thereafter begins to decline. All of this suggests that the source for these later authors may have been Eckfeldt's son-in-law, William E. Du Bois (1810–1881). Whether the source of these distortions was Du Bois or someone else within the Mint, their frequent repetition in publications had the effect of discrediting the entire story.

The earliest appearance in print connecting George Washington to the 1792 half dime comes from William E. Du Bois's little (and rare) book *Pledges of History*. Adam Eckfeldt was still very much alive in 1846, and that probably accounts for the fact that Du Bois, while condensing the story in the McAllister memorandum, still captures the essential facts: "Next came the trial pieces of the infant national mint; among which, as it was patronised by the President, though not actually coined at the Mint, may be counted the 'half dime' bearing the legend 'Liberty, Parent of Science and Industry'" (Du Bois 1846: 128).

The next appearance in print is found in a newspaper story from the McAllister clipping archive. On 23 and 30 January and 6 February 1853, the *Philadelphia Dispatch* ran a series entitled "The Way to Make Money. A Visit to the United States Mint". In the 6 February installment we find this passage:

In 1792, before the Mint was ready to go into operation, General Washington deposited one hundred dollars in silver bullion, which were coined, at his request, into half dimes or "dismes," as they were called at that time. These "dismes" were struck in the cellar of Mr. Harper's saw establishment, at the corner of Sixth and Cherry Streets. The coining machinery of the newly established Mint was deposited in Mr. H's cellar at that time (McAllister Clipping Archive).

This amounts to a close paraphrase of the McAllister memorandum. The sources thanked for help with this series were all Mint employees: Edward C. Dale, Franklin Peale, Jacob R. Eckfeldt, and William E. Du Bois. The last three named were Adam Eckfeldt's chosen successor, son, and son-in-law, respectively (McAllister Clipping Archive). Interestingly, the last installment of this series was published in the *Philadelphia Dispatch* on the first anniversary of Adam Eckfeldt's death, 6 February 1853.

The third appearance in print is found in *Norton's Literary Letter* No. 1, in 1857:

When the Mint was first established in Philadelphia, in 1792, several patterns for coin were prepared, to be decided upon afterwards; General

Washington, taking a lively interest in the work, visited the Mint almost every day. On one occasion, he brought with him \$100 in silver bullion, which, at his request, were coined into half dismes. Of this coin, we annex a specimen—the profile in obverse is supposed to have been intended for Lady Washington. These coins are very rare at the present day, not having been used as currency, but intended as presents from General Washington to his intimate friends in this country and in Europe (Norton 1857: 4).

Norton's was the first publication outside of Philadelphia to print this story. While it closely follows the McAllister memorandum in terms of amount of bullion and Washington's use of the coins, it also differs from the memorandum, which did not claim that Washington visited the Mint nearly every day, nor that Washington personally delivered the bullion to the Mint, and certainly never implied that Martha Washington was the model for the "device emblematic of liberty" on the obverse. Indeed, Washington could not have brought bullion to the Mint to be coined into half dismes, for the Mint was not built until after the half dismes were struck in Harper's cellar. However, the woodcut depiction appearing in Norton's is the earliest published illustration of a 1792 half dime that the authors have found.

The scholarly John Hickox, writing in 1858, echoed Norton's embellishment of frequent presidential visits to the Mint, but was otherwise in accordance with the McAllister memorandum, stating "Washington manifested lively interest in the progress of this work, and frequently visited the mint. It is said that at one time he brought with him a quantity of silver bullion to be coined into half dismes, not for currency, but intended as presents for friends" (Hickox 1858: 55).

Just a year later, Dr. Montroville Wilson Dickeson repeated Norton's version, in his influential *American Numismatical Manual*:

In the establishment of the Mint, President Washington took so deep an interest as to be almost a daily visitor to it. On one occasion he brought with him one hundred dollars in bullion, with the request that it might be coined into half dismes and from the various patterns gotten up for inspection and decision of the government, the following was selected for the purpose: Device: A portrait of the Goddess of Liberty, hair flowing naturally and facing to the left, and said to have been intended for Mrs. Martha Washington. . . . This coinage was not intended for general circulation, but was a private enterprise of Washington's, and distributed by him among his friends in this country and in Europe (Dickeson 1859: 229–230).

The next mention in print introduced new fanciful tales into the mix, and rather ironically so, since the nominal author, James Ross Snowden, was the Director of the United States Mint. Snowden, in the preface to his *Mint Manual* specifically thanked George Bull, Curator of the Mint's coin cabinet, and William E. Du Bois for their assistance. In fact, according to George Frederick

Kolbe, Bull and Du Bois had written the book for Snowden. At least in terms of the 1792 half dismes, this reflected no honor upon the Director of the Mint. Describing the depiction of liberty on the obverse of the 1792 half dismes, the author says:

This is popularly supposed to represent the features of Martha Washington, who is said to have sat for the artist while he was designing it. . . . This piece is said to have been struck from the private plate of Washington, which is not unlikely, considering the great interest which he took in the operations of the infant mint, visiting it frequently, and personally supervising many of its affairs (Snowden 1860: 116; Kolbe 1981: 64).

The list of inventions this passage adds to the story told in the McAllister memorandum is a long one. Martha Washington personally sitting for the artist, George Washington's silver tableware being used to make the coins, and Washington's personal supervision of the early United States Mint are tales that do not appear in the McAllister memorandum. These fanciful embellishments, like McSorley's misattribution of the memorandum's author, would prove to be all but immortal. Moreover, the obvious sentimentality of these embellishments would render the entire Washington association highly suspect to thoughtful numismatists of the future.

There were other mentions of the story in print during 1860, one appearing in a popular magazine. W. C. Prime, in his "Coin in America" article published in *Harper's New Monthly Magazine*, brought a tone of disbelief to the proceedings. "There had been a few coins, known as half dismes", wrote Prime, "struck at the mint prior to the commencement of the regular coinage, but they never went into circulation. It has been stated that they were coined exclusively for Washington himself, and by him distributed to his friends, but of this we have doubts" (Prime 1860: 19). Prime does not detail the reasons for his skepticism; perhaps Snowden's sentimental tales about Martha Washington's modeling and George Washington's melted tableware raised his eyebrows. Prime repeated the story in his book *Coins, Medals and Seals* published the following year: "Tradition says none were coined but a few for Washington himself, out of silver sent by him to the Mint" (Prime 1861: 96). This time, however, Prime did not mention his misgivings about the Washington connection.

Another 1860 recounting of the story is almost completely obscure today, yet this version placed an important twist on its interpretation at the time. The March 1860 issue of *Historical Magazine* reprinted an article by "A.S." that had originally appeared in the 10 February 1859 issue of the *Boston Transcript* newspaper. *Historical Magazine* was the closest thing to a national numismatic periodical in antebellum America, and the article, called "The Washington Coin" was widely

read by the coin collectors of that time. "A.S." was in fact Dr. Augustine Shurtleff, a prominent early Boston numismatist.¹⁸

Shurtleff was writing about what was then a focal point of interest in United States numismatics: coins, medals, and tokens depicting George Washington. Shurtleff listed forty-nine such pieces, and he described number 36 as follows:

36—A small piece of silver, struck from Washington's private bullion on the first establishment of the mint, 1792. Obverse, head of Mrs. Washington, date below. Legend—"Industry Lib. Par. of Science." Reverse, flying eagle. Legend—"Half disme. United States of America" (Shurtleff 1860: 85).

Not only did Shurtleff buy into the Martha-as-model story, he mixed up the obverse legend, which should have read "Lib. Par. of Science & Industry." Shurtleff, however, did get it right when he said it was bullion from Washington and not tableware. And he was so certain of the Washington connection that he labeled the 1792 half disme explicitly as a Washington piece.

This interpretation made enough of a stir to be reprinted yet again, this time on the inside covers of the 17–18 October 1860 Bangs, Merwin & Co. auction sale of the Charles A. Morse collection. Shurtleff's identification of the half disme as a Washington piece, however, did not convince other writers to follow suit; when William S. Baker wrote the definitive work on Washington pieces in 1885, he did not include the 1792 half disme (Shurtleff 1860: inside covers; Baker 1885). Although Shurtleff's article was almost completely forgotten over the years, in its time it helped to cement the connection between Washington and the half disme.

During the next year, 1861, James Ross Snowden was back in print again, with *A Description of the Medals of Washington*, a book cataloguing the results of his two-and-a-half year initiative to augment the collection of the Mint Cabinet's Washington medals. Snowden, as Baker would later, decided against following the Shurtleff precedent, and did not include the half disme as a Washington issue. But the Mint Director had a good deal to say about the piece in his introduction:

The half dismes stated by Washington to have been coined in 1792 were struck before the Mint was regularly in operation, and, it is said, that he furnished the bullion for the coinage. It is believed that half dimes, to the amount of one hundred dollars, were then coined and issued. They were of legal weight and fineness, and evidently intended for circulation. These coins are now very rare and are highly valued. There is one of them in the Cabinet of the Mint. The obverse presents a head of Liberty facing to the

18. This identification was made by Attinelli (1876: 20). Shurtleff compiled his list from the pieces found in his own collection plus those in the collections of his fellow Bostonians Jeremiah Colburn and Rev. J. M. Finotti. The 1792 half disme was part of Shurtleff's collection.

left—a likeness of Mrs. Washington, the wife of the President, is evidently intended; and it contains the legend LIB(erty) PAR(ent) of SCIENCE AND INDUSTRY, with the date of 1792. The reverse exhibits an eagle displayed, with the legend UNITED STATES OF AMERICA, and the denomination, HALF DISME (Snowden 1861: 18).

Snowden's account is an amalgam of details found in the McAllister memorandum and subsequent accretions. And then there are errors, such as his use of the "dime" spelling and his replacement of the ampersand in the coin's legend with the word "and". But Snowden was the first author to note that the half dimes (or at least many of them) had been released for circulation. And he also was the first to raise the issue of their fineness, an important subject about which more will be said later.

Snowden's yarns spread rapidly across the country; only five years later, the first coin sale catalogue printed on the West Coast, offering for competition the collection of E. I. Barra, had this to say:

History says that WASHINGTON, who was then President, was so much interested in the Creation of the Mint, that he visited the premises every day, and when it was ready for operations, he carried some of his silver plate and had it melted and coined into money of his beloved country (Keller 1866: 11).

Just how deeply Norton's yarn about Martha Washington and the Snowden fables about Martha's posing and George's tableware sank into the consciousness of coin collectors—not to mention how badly all of these elements could be distorted—are on display in the November 1867 issue of *Mason's Coin and Stamp Collector's Magazine*. Ebenezer Locke Mason, Jr., the editor of that periodical, was wont to exaggerate, which he managed admirably in this instance:

There were silver Dimes and Half-Dimes coined in England from Washington's silver plate, which was sent to that country to be converted into coin. Upon the reception of the coins, Washington was grieved and offended to find his wife's likeness upon the obverse of the coins. It was owing to this fact that the small Washington silver pieces of 1792 had no general circulation, being considered "family coins" and but very few of these silver Dimes or Half-Dimes can be found at the present day (Mason 1867: 59).

Leaving aside the unlikelihood that Washington would turn to Britain to strike the first coins of the United States, it seems even more contradictory that the President, if truly "grieved and offended" by the portrait, would have reserved the mintage for use as "family coins". To Mason therefore belongs the dubious distinction of writing the biggest distortion of Eckfeldt's recollection.

By 1875, nearly thirty years after first appearing in print, the story had become so garbled that even so thoughtful a numismatic scholar as Sylvester Sage Crosby, in his *The Early Coins of America*, could not separate fact from embellishments:

The half dismes here referred to were issued before the Mint was completely organized, and tradition reports, that, owing to the scarcity of silver, Washington caused some of his private plate to be melted to supply the deficiency, and that it was from that supply that these patterns were coined. It is said that the value of about one hundred dollars was coined into half dismes (Crosby 1875: 364).

Crosby went on to report that "It has been said that the head upon this pattern [the Birch cent] as well as those upon the disme and half disme, was intended for a likeness of Martha Washington (Crosby 1875: 365).

Thus, by 1875, Norton's and Snowden's distortions about Martha Washington and the Washington family plate had become fixed in the literature. In 1881, for example, when A. M. Smith issued the first in a series of popular guides to the United States Mint, the story of the 1792 half disme was merely lifted from Snowden's *Mint Manual* (Smith 1881: 6). In fact, by the time that Harold P. Newlin authored the first serious study of half dimes in 1883, the Martha Washington angle had become so pervasive that he refers to "the 1792 Half-dime, known as the Martha Washington Half disme . . ." (Newlin 1883: 4).¹⁹ Newlin mentions no details from the McAllister memorandum, but he did make a cogent argument against one of the memorandum's claims, echoing Snowden by refuting the assertion that the half dismes were not struck for circulation (Newlin 1883: 4–5).

Another appearance in print during the nineteenth century, from Crosby in his *The United States Coinage of 1793*, introduces a new vagueness to the story. Crosby writes of the half disme: "This is an extremely interesting piece, as it is said that Washington furnished a considerable amount of silver to be coined into 'Half Dismes' for gifts for his friends" (Crosby 1897: 5). One hundred dollars worth of silver hardly constituted a "considerable" amount; one surmises that Crosby was simply unsure of the number.

Edgar H. Adams and William Woodin, in their 1913 book, *United States Pattern, Trial, and Experimental Pieces*, display considerable ambiguity about the half

19. The "Martha Washington half disme" appellation was current well before Newlin; see Frossard (1877: 3) wherein is offered "The Martha Washington 1/2 dime" condition "rather poor and pierced" for \$3.00. Ten years prior to this, in W. Elliot Woodward's Tenth Semi-Annual Sale (the Mickley Collection), Woodward cataloged lot 2133, an uncirculated 1792 half disme, as "bust of Martha Washington". The earliest mention of Martha Washington in connection with a 1792 half disme that the authors have found in a coin catalogue is in the 12 July 1860 Bangs, Merwin & Co. sale of the Jacob Glosser collection, in which lot 200 was described as "Martha Washington Half Dime or Disme, 1792, very fine and very rare, known to be the only one in the city [New York]." The earliest catalogue that connects the Washington name to the 1792 half disme is the 12–13 June 1855 M. Thomas & Sons sale of the collection of A. C. Kline (the occasional trade style of John W. Kline), wherein lot 70 is described as "Washington Half Dime—Silver".

dismes. They seem to agree with Newlin by writing, "This half dime could very well have been a coin of regular issue . . ." but nonetheless list the 1792 as a pattern. They accept Snowden's silver tableware invention, stating that the half dismes were "... produced from the melted private plate of Washington", but reject Norton's yarn about Martha Washington being the model as "not probable". Finally, Adams and Woodin provide an incorrect time of striking for the half dismes, c. 9 October 1792 (Adams and Woodin 1913: 1).

Other twentieth-century authors added still more embroiderings to the story. Frank H. Stewart, for instance, in his *History of the First United States Mint*, writes "It has been claimed, and it is probably true, that the half 'dismes' he [Washington] mentioned in his Fourth Annual Address to Congress were made from silver furnished by him. They are even today known as Washington half dismes" (Stewart 1924: 21). Apparently, it was no longer known as the "Martha Washington half disme" as Newlin had reported in 1883. Another mention in print before Haden's 1943 discovery of the draft McAllister memorandum introduces one last blunder into the mix, this one from a surprising source: the scholarly Neil Carothers. In his 1916 Princeton doctoral dissertation, subsequently published in 1930 as *Fractional Money*, Carothers misstates in a footnote, "Washington himself presented some of his own silver plate to the mint in 1792 and a few dimes were turned out" (Carothers 1930: 70 n. 2).²⁰

Even after the McAllister memoranda were discovered, accuracy did not improve. Cornelius Vermeule, in his *Numismatic Art in America*, states that "the very first national coinage in 1792 is said to have been struck from silver plate donated by Martha Washington . . ." (Vermeule 1971: 26). In sharp contrast to the general history of American numismatic scholarship, the state of knowledge about the origins of the 1792 half disme actually deteriorated markedly over the 125 years from 1846 to 1971.

One other twentieth-century notice in print bears mention. In 1947, the team of Frederic Dannay and Manfred B. Lee, writing under the pen name of Ellery Queen, published a collection of short mystery stories called *Calendar of Crime*. In one of the stories, "The Adventure of the President's Half Disme", detective Ellery Queen discovers where George Washington buried a 1791 half disme, which the story explains as an "experimental coin" struck before the regular issue in 1792. Queen gets the story straight, though, for one of the characters quotes Washington: "... the President did say . . . that the half disme in his pocket had been coined from silver he himself had furnished and had been presented to him as a keepsake" (Queen 1947: 29–30; Haycraft and Beecroft 1959: 253).

So pervasive had the connection between George Washington and the 1792 half dismes become that there is even an oil painting in existence that depicts a

20. Carothers probably meant half dismes.

scene that undoubtedly never actually occurred: "Washington Inspecting the First Money Coined by the United States". In 1914 Frank Stewart, who owned the building in Philadelphia formerly occupied by the first United States Mint, commissioned (or at least worked closely with) artist John Ward Dunsmore to imagine the presentation of the first United States coins to President and Mrs. Washington. The painting, which is reproduced on page 20 of Stewart's *History of the First United States Mint*, is described thus by George Frederick Kolbe (1998: 29):

Depicted are Martha Washington, lorgnette in hand, seated before Henry Voigt [Chief Coiner] who presents a tray of the just-struck silver coins. Depicted in the distinguished group around her are President Washington, Secretary of State Thomas Jefferson, and Treasury Secretary and Mrs. Alexander Hamilton. Private Secretary to the President, Tobias Lear, watches newly-appointed Mint Director David Rittenhouse offer a coin from the tray for the First Lady's inspection and Adam Eckfeldt surveys the event from his post at the coining press.²¹

Truly, then, by the time that the first of the McAllister memoranda was discovered in 1943, the whole Washington-and-the-half-dimes story had taken on the status of myth, complete with its own sagas and even its own iconography.

THE MISSING McALLISTER MEMORANDA

The slow but steady deterioration of Eckfeldt's recollections in print—from accurate to embellished to embroidered to outright fiction—is easy to explain. The McAllister memoranda themselves were unknown to the numismatic public until Haden's 1943 discovery of the draft tipped into the European numismatic book. The transmission of the Eckfeldt eyewitness testimony, then, relied upon the interpretations of various writers, some of whom were more reliable than others. The accounts written during Adam Eckfeldt's lifetime and just after his death were true to the McAllister memorandum. The first embellishment appeared in 1857, four years after Eckfeldt's passing. Nearly every succeeding retelling strayed a little farther from the Eckfeldt recollection, until even respected numismatic scholars had Martha Washington posing as Miss Liberty, or George Washington donating the family tableware to the Mint, neither of which is to be found in any of the McAllister memoranda. It is a small wonder, then, that many scholars have come to dismiss the Eckfeldt recollection as the numismatic equivalent of "Washington and the cherry tree", the didactic fable concocted by Mason Locke "Parson" Weems.

21. The Dunsmore painting is also reproduced, in full color, on the covers of this catalogue (Kolbe 1998). James F. Kelly, a Dayton coin dealer, made color copies of this painting in the 1940s, and George Frederick Kolbe made 125 copies in 1998.

Nor is it surprising that the discoveries by Haden/McSorley and Breen have done little to correct these errors. As previously noted, neither Haden nor McSorley seems to have purchased the European numismatic book into which the draft of the memorandum was tipped. Its fate since McSorley saw it at Leary's Book Store is unknown. Were it not for Haden's fortuitous transcription of the memorandum, we would have no record of its contents at all. And the record we do have of it—published in the letters column of the May 1943 issue of *The Numismatist*—virtually guaranteed that only a handful of serious scholars would be aware of the information it contained.

The Breen copy, too, has proved nearly as elusive and ephemeral. Although Breen did purchase it from the Rev. Edward W. W. Lewis, and it was published in *Coin World* for 20 April 1962, few copies of weekly papers are saved, and adequate indices for newspapers are generally not available to researchers. Again, today, only the most devoted numismatists would be aware of its existence. Ironically, one devoted numismatist who eventually became unaware of its existence was Walter Breen himself. He wrote twice about the half disme after the 20 April 1962 issue of *Coin World* was published. In neither *A Coiner's Caviar* nor *Walter Breen's Complete Encyclopedia of U. S. and Colonial Coins* is the McAllister memorandum mentioned (Breen 1977: 30; Breen 1988: 153, 155). In fact, in the latter book, Breen stated that the half dismes were struck from "\$75 worth of silver bullion, some of which reportedly came from melting down old tableware (surviving presidential tableware at Mount Vernon is Sheffield plate)" (Breen 1988: 153). Although he does not quite assert it, Breen strongly implies that Snowden was right about Washington's tableware as the source of the bullion and that this silver service consisted of Sheffield plate. Breen may have recalled the hallmarks on George Washington's tableware, but he completely forgot that he himself had ever owned a draft of the McAllister memorandum—and he had likewise forgotten that this document pegged the amount of silver bullion at \$100, and said nothing about tableware. Like the Haden/McSorley copy, the location—indeed the very existence—of the Breen copy is unknown today.

It is no wonder, then, that the two memoranda drafts—elusive in themselves and published only ephemerally—made such slight impact upon the numismatic world. It was not until 1996 when Herkowitz published his findings after purchasing the finished copy that the true author was revealed, the existence of three versions was announced, and the accurate text of each was published. These revelations made little impact, however, so great was the weight of 140 years of accumulated fanciful balderdash.

RECONSTRUCTING THE SEQUENCE

It is now possible for us to reconstruct the sequence of events that led to the creation of the three memoranda. On 9 April 1844, John A. McAllister, Jr., retired

manufacturer, numismatist, and respected antiquarian, visited the United States Mint and met with retired Chief Coiner Adam Eckfeldt, likely in the special room that the Mint had reserved for its distinguished former employee. Eckfeldt told the story about Washington and the half dismes. McAllister was deeply impressed by the historical significance of this eyewitness account, so he went home and promptly set out to document what he had heard.

McAllister began with the copy that would eventually come into the possession of Rev. Edward W.W. Lewis and later Walter Breen. Upon rereading this first draft, he crossed out two words and began work on a second draft, this one fated to be tipped into a European numismatic book and to be discovered by Edward B. Haden and Charles McSorley, Jr. This second draft, like the first, was signed simply "J. Mc." Finally, satisfied with his preparations, McAllister wrote a third and final version, made a few word changes, and boldly signed it "John McAllister, Jr." This final copy was eventually purchased by Carl Herkowitz.

THE FINENESS OF THE 1792 HALF DISMES

The 1792 half dismes were struck under the authority of the Coinage Act of 2 April 1792. Section 9 of the Act specified the value, weight, and fineness of all circulating United States coins. The pertinent language read: "Half Dismes—each to be the value of one-twentieth of a dollar, and to contain eighteen grains and nine-sixteenths parts of a grain of pure or twenty grains and four-fifths parts of a grain of standard silver" (Statutes at Large of the United States of America).

Section 13 established fineness: "And be it further enacted, that the standard for all silver coins of the United States, shall be one thousand four hundred and eighty-five parts fine to one hundred and seventy-nine parts alloy; and accordingly that one thousand four hundred and eighty-five parts in one thousand six hundred and sixty-four parts of the entire weight of each of the said coins shall consist of pure silver, and the remaining one hundred and seventy-nine parts alloy; which alloy shall be wholly of copper" (Statutes at Large of the United States of America).

These two sections of the Mint Act, therefore, require the half dime to weigh 20.8 grains and have a fineness of .8924. James Ross Snowden (1861) asserted that the 1792 half dismes were of statutory weight and fineness. This is a matter of some importance, for the half dismes were struck at the very inception of the Mint, at a time when it had no other silver on hand for coinage. It is probable that the Mint had neither sufficient silver on hand, nor perhaps even the expertise required, to alloy the silver bullion to the precise standard of .8924 fine. In fact, throughout 1792, the Mint lacked even copper, for they frequently ran advertisements seeking to buy that metal in Philadelphia newspapers (for example, see *Dunlap's American Daily Advertiser*, 4 October 1792, p. 1). If, as Snowden claimed, Washington's silver tableware was the source of the bullion, then the half dismes would probably be of the same fineness as the tableware. Had the tableware been all sterling silver,

the half dismes should be .925 fine. However, most silver tableware in eighteenth-century North America was not sterling; it was usually made from "coin silver", the fineness of which, like that of circulating coinage, typically varied between .750 and .900 fine. If Breen was correct that Washington's tableware was Sheffield plate, the fineness of the half dismes would be much lower, below .500 (Sheffield plate is made by plating a copper core with silver).²² On the other hand, if the McAllister memorandum was correct, and Washington provided "Bullion or Coin", the fineness of the resulting half dismes would be between the extremes of sterling and Sheffield plate.

The authors have not been able to secure an assay to conclusively measure the fineness of a half disme specimen. Through the cooperation of the American Numismatic Association and the American Numismatic Society, however, we have been able to ascertain the specific gravity (SG) of two half disme specimens. The SG of a material is a comparison of its weight with the weight of an equal volume of water. SG, therefore, measures the density of a material. The SG of .999 silver is a known constant (10.49). The SG for sterling silver is 10.36. The SG of the American Numismatic Association Museum half disme is 10.25 (Erik Heikkinen, telephone conversation with Orosz, 9 January 2004). The SG of the specimen belonging to American Numismatic Society museum docent Jerome Haggerty is approximately 10.15 (Robert Wilson Hoge, e-mail communication, 12 February 2004).

While SG is not as precise as an assay as a means of determining the fineness of an alloyed coin, it does provide a reliable approximation. The American Numismatic Association specimen's SG of 10.25 yields an approximate fineness of .850. The Haggerty coin's approximate SG translates into a fineness of about .780. These findings are sufficient to refute Breen, for if we average the two SGs, a fineness of .815 means that the bullion source was considerably finer than Sheffield plate.

Moreover, these findings provide support for the McAllister memorandum's assertion that Washington provided "Bullion or Coin" to strike the half dismes. The fact that the half dismes are approximately .815 fine rules out one possible source of the bullion, Spanish pillar dollars of eight reales, which were struck to a .9166 standard (Mossman 1993: 55). There were, however, a number of foreign coins in circulation in the new republic during the early 1790s which, if presented in a miscellaneous lot, could average out to approximately .815 fine. These include the Spanish cross pistareen, ranging from .812 to .841 fine; the Dutch lion dollar of 40 stuivers, .750 fine; the Dutch rijksdaalder of 50 stuivers, .885 fine; and the Dutch cross dollar or patagon of 48 sols, .875 fine (Mossman 1993: 12, 68). Finally, the fact that the half dismes are less than statutory fineness suggests that the Mint lacked the ability to alloy the bullion to the prescribed fineness.

22. Breen probably derived this notion from Kathryn C. Buhler's survey of George Washington's surviving silver at Mount Vernon (Buhler 1957).

THE PRELUDE TO THE 1792 HALF DISMES

Less than two weeks after the passage of the Mint Act, on 14 April 1792, George Washington appointed the eminent astronomer David Rittenhouse to be the first Director of the United States Mint. Rittenhouse was in declining health, and he politely refused the honor. President Washington, however, was persistent, and ultimately persuasive. Rittenhouse did not actually sign the oath of office until 1 July 1792, but he began discharging his duties shortly after his appointment.

The new director, on 9 July 1792, wrote to the President detailing actions he had already taken (Julian 1962: 1837):

But as small money is very much wanted we think proper, in the meantime, if your Excellency approves of it, to Coin some Copper Cents & Half Cents, and likewise small Silver, at least Dimes and Half Dimes. I have purchased on account of the United States, a House and Lot which I hope will be found convenient for the Mint, but considerable alterations must be made, and some small new buildings erected. I have likewise engaged Mr. Voigt to act as Coiner, and he has several workmen now employed in making the necessary engines and preparing the dies.²³

Despite his poor health, Rittenhouse had obviously thrown himself into his new work. He had purchased lots fronting North Seventh and Filbert Streets as the location for the new Mint and launched preparations for operation, although it would not be ready to strike coins until December of 1792. He also made a key hire in the person of the first Chief Coiner, Henry Voigt. A clockmaker by trade, Voigt was no more ready to enter upon his official duties than was the Mint building itself, for Section 5 of Mint Act required the acting Chief Coiner to post the then

23. Rittenhouse's use of the "dime" spelling, not "disme", has a number of precedents. For instance, reports of the Confederation government's Board of Treasury to the Continental Congress during the 1780s routinely use the "dime" spelling (see reports of 8 April 1786 and 8 August 1786 (Fitzpatrick 1934: 965, 504). Contemporary cambists used "dime" as well (see Sower 1793: 3). Early Mint reports from the late eighteenth and early nineteenth centuries almost invariably use the "dime" spelling; the authors have been able to find only one instance in these early reports in which the "disme" spelling is used (Gallatin 1806). Indeed, the only American eighteenth-century spellings of "disme" of which the authors are aware are found in the Mint Act of 2 April 1792, in George Washington's letter to Rittenhouse of 9 July 1792, on the legends of the half dismes and dismes themselves, in Thomas Jefferson's personal memorandum book for 1792 in which he acknowledges receipt of the 1,500 pieces struck, and in a foreign exchange broadside (c. 1796) in the library of Eric P. Newman. The broadside is titled "A Table of the Real & Imaginary Monies of America, Europe, Asia, and Africa, with the intrinsic Value of the Coin of each Country, reduced to Federal Money". The broadside uses "half disme", "half Dismes", "disme", and "Disme" with the long "s" in each instance (Newman 1996: facsimile insert). Despite this sparse use of "disme", the name of the denomination was not officially changed to "dime" until the Coinage Act of 18 January 1837.

enormous bond of \$10,000 before entering upon the execution of his office. And yet, as Rittenhouse's letter makes plain, the Director was not allowing the lack of a Mint building or an officially confirmed Chief Coiner to prevent him from preparing to strike coins. Voigt had "several workmen now employed in making the necessary engines and preparing the dies." And half dismes were on Rittenhouse's priority list.

As previously discussed, the fledgling Mint took up residence in the cellar of John Harper's saw-making establishment at Sixth and Cherry while the Mint building was being prepared for occupancy. In Harper's cellar, Voigt's workmen set up the striking apparatus, and waited for the word to proceed. That word came from the Chief Executive himself, for on 9 July 1792, the same day Rittenhouse had written Washington, the President replied:

I hereby proclaim my approbation of the purchase he [Rittenhouse] has made of the house and lot for the Mint; of the employment of Mr. Voigt [*sic*] as Coiner, of the procuring fifteen tons of copper; and proceeding to coin the cents and half-cents of copper; and dismes and half-dimes of silver. . . (Letter to Rittenhouse, 9 July 1792, Washington Papers).²⁴

Rittenhouse now had a *de facto* Mint and a Chief Coiner, who, even though not bonded, was at least approved by the President of the United States. The Director wasted no time in ordering half dismes to be the first product of the United States Mint. In the remarkably short span of four days from the date of Washington's letter, the coins were struck.

THE CREATION OF THE 1792 HALF DISMES—NEW EVIDENCE

In 1792, responsibility for the oversight of the Mint was vested not in Secretary of the Treasury Alexander Hamilton, but rather in Secretary of State Thomas Jefferson. There were a number of reasons for this, notably Jefferson's wide acquaintance with French coinage experts, his efforts to secure skilled personnel for the early Mint, and not least, as a sort of consolation prize because President Washington had given oversight of the United States Post Office to Jefferson's ideological rival, Hamilton (Taxay 1966: 73). Don Taxay, in his 1966 book, *The U.S. Mint and Coinage*, was the first to demonstrate that Jefferson had been directly involved in the chain of production of the 1792 half dismes. Taxay quotes from what he calls Jefferson's "household account book" for 13 July 1792 as follows: "Recd. from the

24. This letter was actually drafted by Thomas Jefferson and used verbatim by Washington. Rittenhouse's letter to Washington of 9 July set in motion the following chain of events. Washington, on 9 July, sent a note to Jefferson beginning, "Pray draught a proper answer to the enclosed, approving of what the Director of the Mint has done, and is about to do. . . ." Jefferson, also on 9 July, sent Washington two drafts. Washington used one without any changes and the other was discarded, its contents unknown today (Catanzariti 1990: 204–205).

mint 1500. half dimes of the new coinage" (Taxay 1966).²⁵ This finding was very significant, for it corrected the time of striking as given by Edgar Adams and William Woodin (9 October 1792) and established the mintage for the pieces.

Taxay, however, missed a very significant entry in Jefferson's 1792 memorandum book. During the course of writing this article, the authors were queried by Eric P. Newman as to whether Jefferson had really used the "dime" spelling in the 13 July 1792 entry, since in other writings he had customarily used "disme". The authors consulted Barbara B. Oberg, editor of the Jefferson Papers project at Princeton University, who affirmed, from a photocopy of the original memorandum book in the Library of Congress, that Jefferson had used the "disme" spelling.²⁶ Dr. Oberg also kindly made available a photocopy of the Jefferson Papers' published transcription of Jefferson's memorandum book for 1792, and in it the authors discovered an additional and important entry heretofore unknown to the numismatic community (Oberg, e-mail communication to Orosz, 30 December 2003).

Under the date of 11 July 1792, Jefferson writes: "Delivd. 75 D. at the Mint to be coined" (Bear and Stanton 1997: 1874).²⁷ This newly discovered passage is extremely significant. It establishes that Jefferson himself delivered the silver to the Mint (for elsewhere in the memorandum book, he consistently notes when others run errands on his behalf). The passage, however, on first glance appears to record an impossible sequence of events. As Eric P. Newman notes, it would have been literally impossible for the new Mint to have received \$75 in bullion or coin on 11 July and melt it, refine it, roll it into strips, wash the strips, anneal them, punch out the planchets, remelt the scissel, roll into strips again, wash, anneal, and punch out the planchets once more, run all of the planchets through the Castaing machine to reed their edges, and then strike the coins, all in time to deliver 1,500 half dismes to Jefferson on 13 July (Newman, personal communications, 29–31 January 2004). Might Jefferson have erred on the dates of one or both of his entries in the memorandum book? This seems highly unlikely, for there are seven separate notations under the 11 July date and fourteen under the 13 July date, with the pertinent entries being the second for 11 July and the thirteenth for 13 July. These notations, therefore, are almost certainly entered upon the correct dates.

25. The Thomas Jefferson Papers project at Princeton University refers to this source as Jefferson's "memorandum book". This name will be used henceforth rather than Taxay's "household account book".

26. Taxay was a careful scholar; the misrendering of "disme" in his quotation of Jefferson was probably an editorial error.

27. Jefferson appears never to have used the dollar sign in his correspondence. He sometimes used a capital "D" with a horizontal line drawn through the middle of it to signify "dollars". In this entry, however, there is a "D" with no horizontal line (Oberg, e-mail communication to Orosz, 10 February 2004).

Newman offers a logical explanation for this apparent impossibility. While the Mint could not have executed the entire process of coinage in two days' time, it could have struck 1,500 half dismes in that span, if all of the preparation of the planchets had been completed ahead of time. Jefferson, therefore, must have delivered 1,500 finished, edge-reeded blanks to the temporary mint in Harper's cellar on 11 July.

But how did the Secretary of State come to be in possession of the half disme planchets? Newman provides a hypothesis. Washington's bullion or coin was delivered to Harper's cellar, melted, refined to the extent possible, rolled into strips, washed, and annealed. Planchets were then punched out of the strip using Adam Eckfeldt's screw press as a punching device. They replaced the upper die holder with a punch and replaced the lower die holder with a flat base plate with a hole bored in it. After the planchets were punched, they were run through the Castaing machine to be reeded (Newman, personal communication, 11 February 2004). Since the Mint would then have required reasonable time to reconvert Eckfeldt's screw press into a coin-striking apparatus, a decision was made to deposit the planchets at the Department of State for safekeeping. When Eckfeldt's press was ready for striking coins on 11 July, Jefferson personally delivered the planchets to the Mint (Newman, personal communication, 12 February 2004).

The Newman scenario for the preparation of the half disme blanks receives strong corroboration from the earliest surviving records of the Mint. In his *History of the First United States Mint*, Frank Stewart records the Account of Warrants drawn by David Rittenhouse for Mint expenditures from 1792 to 1793. Warrant number seven, dated 29 August 1792, paid John Harper \$217.85 "for cutting, presses, castings." Warrant number ten, dated 1 September 1792, also paid Harper \$34.42 for unspecified services (Stewart 1924: 170). The warrants demonstrate that Harper was doing work for the Mint at his shop and billing the government for it. The "cutting" mentioned in warrant number seven probably refers to cutting blanks out of strip. The "castings" mentioned in the same warrant may refer to iron castings for Eckfeldt's press, but more likely pertain to silver casting to be rolled into strip (Newman, personal communication, 10 February 2004). The warrants were written more than a month after the half dismes were struck, so they may or may not have been payment to John Harper for the preparation of the half dismes. What is indisputable, however, is that Harper was doing this type of work at or shortly after the time the half dismes were struck. Indeed, Rittenhouse's warrant number one is dated 18 July 1792—exactly one week after Jefferson delivered the half disme planchets for coinage at the Mint (Stewart 1924: 169).

There is another plausible explanation as to why the half disme planchets were sent to Jefferson before they were struck. Once more, Eric P. Newman provides a logical explanation. Until 9 July, Mint Director Rittenhouse did not have presidential approval of his acting Chief Coiner, nor did he have Washington's permission to strike the half dismes. It is significant that Jefferson drafted Washington's letter

of approbation on 9 July, and two days later, the Secretary of State delivered the planchets to the Mint. Jefferson, in short, may have been holding the blanks pending presidential permission to coin them (Newman, personal communication, 17 February 2004).

Jefferson's entry of 11 July stating he had delivered "75 D." to the Mint to be coined seems on the surface to conflict with the statement in the McAllister memorandum that \$100 in "Bullion or Coin" was presented by Washington. This apparent discrepancy can be easily explained, however, by the fact that there is inevitably waste in the process of melting, rolling, and punching the bullion used for coinage. Given available technology in 1792, about 50% of the strip would have been punched into planchets on the first run; then after remelting another 25% of the original strip would have been punched into planchets. If no further remeltings were undertaken, about \$25 worth of the original silver would be left as scissel or scrap, and \$75 would be available as planchets for coining (Newman, personal communication, 9 December 2003). So the actual number of half dismes coined—1,500—is entirely consistent with a starting amount of \$100 in silver.

Jefferson's two notations—his delivery of "75 D." to Harper's cellar on 11 July 1792, and his receipt of 1,500 half dismes from the Mint on 13 July—suggest that the Mint achieved an extraordinary record for a first attempt at coinage: 1,500 blanks struck without a single one spoiled. Eric P. Newman theorizes, however, that the Mint may have held back a few spare planchets to cover any spoilage during the coining process and to retain a few examples for assay or souvenir purposes. Thus, the Mint could have returned 1,500 coins to Jefferson even if they had spoiled some of the planchets during the process of striking them. Indeed, the mintage of 1,500 suggests a round number deliberately chosen for convenience (Newman, personal communication, 17 February 2004).

A connection to Washington is also strongly implied by the manner in which Jefferson recorded his involvement with the production of the 1792 half dismes. As the member of Washington's cabinet responsible for the Mint, Jefferson might have been expected to record the striking and the delivery of these coins in an official ledger book of the Department of State. Instead, he recorded the delivery of the planchets and the receipt of coins in his personal memorandum book, as if the half dismes were his property.²⁸ There is, however, no evidence, not even numismatic lore or tradition, that Jefferson provided the bullion for the half dismes.

This apparent mystery can be resolved if the McAllister memorandum is correct regarding the source of the bullion. According to Section 14 of the Mint Act of 1792, the struck coins were the personal property of the party who had

28. The authors wish to thank R. W. Julian for bringing this line of reasoning to their attention and also for suggesting a review of Jefferson's memorandum book for 1792 (R. W. Julian, telephone conversation with Joel J. Orosz, 9 January 2004).

provided the bullion for striking; therefore, if Washington had provided the “Bullion or Coin”, the 1,500 half dismes were the President’s personal property. On 13 July 1792, however, these coins could not have been personally delivered to Washington in Philadelphia for the simple reason that the President had left on 11 July—the very day that Jefferson had delivered the planchets to Harper’s cellar for striking—for an extended stay at Mount Vernon (Baker 1897: 221). If Washington indeed had provided the bullion, and therefore owned the coins, Jefferson could have accepted delivery on Washington’s behalf. The Secretary of State would have needed to make a record of this event, but since the transaction was of a private rather than a public nature, he recorded it not in an official government ledger, but rather in his personal memorandum book.

Jefferson notes in his memorandum book that he left Philadelphia for Monticello on 13 July 1792 (in fact, this is the next entry after that noting the receipt of the half dismes). The memorandum book also documents Jefferson’s visit with the President at Mount Vernon on 1 October 1792, but is silent as to whether he may have delivered the half dismes to Washington on or before that occasion. Nor does the memorandum book record any such transfer after Washington returned to Philadelphia on 13 October 1792.

THE STRIKING OF THE 1792 HALF DISMES

Thanks to the newly discovered Jefferson notation, we now know that the half dismes were struck between 11 July, when Jefferson delivered the planchets to Harper’s cellar, and 13 July, when the struck coins were returned to the Secretary of State. There is nothing to suggest that Jefferson attended the actual striking, and we know that Washington could not, for he was en route to Mount Vernon. Mint Director David Rittenhouse may have been present, although there is no record.

Acting Chief Coiner Henry Voigt undoubtedly presided over the striking of the half dismes in Harper’s cellar. It is important to note that there was a Mint contractor present at this creation: Adam Eckfeldt. Actually, Eckfeldt’s connection with the Mint predated that of even Director Rittenhouse, for in January of 1792 he supervised the striking of some Washington head pattern coins for Robert Morris, the “Financier of the Revolution” (Taxay 1966: 102).²⁹ Further confirmation of this fact comes from an 1829 visitor to the Mint, one B. L. C. Wailes, who stated that, “Mr. Eckfeldt one of the superintendents (the second in grade) is an artist & has been in the Mint from its first establishment. [He] made the first dye [sic] used in it” (Moore 1954; Taxay 1966: 71). Eckfeldt was thus in a position to witness the creation of the 1792 half dismes at first hand.

29. Robert Morris, Superintendent of Public Finance during the Revolution, remained active in efforts to establish a national mint for years thereafter.

ASSESSING THE VALIDITY OF ECKFELDT'S MEMORY

In the McAllister memorandum, Adam Eckfeldt made five claims:

1. The 1792 half dismes were struck expressly for President George Washington.
2. President Washington deposited silver coin or bullion to be melted down and struck into the half dismes.
3. The coin or bullion amounted to one hundred dollars in value.
4. The 1792 half dismes were struck for presentation, not for circulation.
5. The 1792 half dismes were struck before the Mint was ready for operation, in the cellar of John Harper, at the corner of Cherry and Sixth Streets in Philadelphia.

Starting from the end and working backward, most numismatic historians accept statement 5 as a fact. Statement 4, however, is not wholly accurate. James Ross Snowden, Harold Newlin, and Walter Breen all agree that half dismes were struck to be circulated, not saved. George Washington himself, in his Fourth Annual Address to Congress, 6 November 1792, made it clear that half dismes had been struck as circulating coinage: "There has also been a small beginning in the coinage of half dismes; the want of small coins in circulation calling first attention to them" (Fitzpatrick 1939: 210).³⁰ The surviving specimens tend to confirm Washington's statement, but they also lend some credence to Eckfeldt's recollection. Walter Breen estimates that there are 200 to 250 half dimes in existence today, with grades distributed from good to uncirculated, and no more than 10% of these survivors in the uncirculated range (Breen 1988: 155). Veteran Kentucky dealer Jonathan K. Kern confirms that these estimates are consistent with his experience (Kern, telephone conversation with Orosz, 23 May 2003). Further corroboration of these estimates comes from the population reports of the two largest coin-grading services. Through May of 2003, the Professional Coin Grading Service and the Numismatic Guaranty Corporation of America had "slabbed" a total of seventy-eight of the 1792 half dismes, seventeen of which were in uncirculated condition. This is consistent with the Breen estimate of 200 to 250 survivors with about 10% uncirculated, for this total does not include those "slabbed" by other grading services, coin owners are more likely to send in higher-grade coins for certification, and in no coin series does the number of those "slabbed" approach

30. The paragraph in which this passage resides and the paragraph preceding it were actually drafted by Thomas Jefferson and delivered by Washington virtually as written by Jefferson (Catanzariti 1990: 486n). John J. Kraljevich, Jr., has pointed out one important alteration in the final version. Jefferson's first draft read: "half dismes and cents", but "cents" was omitted from the final version. Kraljevich (2004: 66–67) theorizes that Jefferson was referring to Birch cents.

100% of the total mintage (Professional Coin Grading Service 2003; Numismatic Guaranty Corporation of America 14 July 2003).

The circulation—in many cases, the extensive circulation—of about 90% of the extant half dismes provides strong corroboration for Washington's statement that they were struck for use in daily commerce. On the other hand, if we accept Jefferson's mintage figure of 1,500, a total of 200 to 250 extant specimens means that the survival rate for 1792 half dismes would be 13% to 16%, an extremely high figure when compared with other circulating eighteenth-century first-year-of-issue coins. For example, the late Jack Collins estimated that 120 to 130 of the 1,758 specimens of the 1794 silver dollar are in existence, a survival rate of 6% to 7% (Bowers 1993: 1.52). While this is less than half of the comparable rate for the 1792 half disme, the 1794 silver dollar can boast a far better fate than most eighteenth-century first-year-of-issue U.S. coins. A mere 4% of 1793 wreath cents, for example, are estimated still to be with us (Borckardt 2000: 47). Chain cents from the same year fared even worse, surviving at an estimated rate only of about 2.8% of the original mintage (Borckardt 2000: 34). It would appear, given the likelihood that 1792 half dismes have survived at a rate two to four times that of circulating coins from the same timeframe, that a significant number were saved at or near the time of issue. It is at least possible, therefore, that Washington reserved some of these coins for presentation to friends in Virginia or in Europe, as stated in the McAllister memorandum.

Statement 3, asserting that the coin or bullion amounted to \$100 in value, suggesting that 2,000 half dismes were coined, would seem to be refuted by the notations in Jefferson's personal memorandum book, in which he states that he had delivered 75 dollars in silver value to the Mint on 11 July and received 1,500 coins on 13 July 1792. However, this evidence, as previously demonstrated, is not conclusive.

Section 14 of the 2 April 1792 Mint Act provided that any person might bring gold or silver bullion to the Mint for coinage, and that the Mint would assay the bullion and, as soon as possible, return coins of equal weight in the same metal, free of expense to the depositor. If Washington indeed provided \$100 in bullion, he was entitled to receive \$100 in coins, but it must be remembered that the half dismes represented the Mint's first attempt at coining money. There was bound to be some inefficiency in the process, resulting in fewer coins than the theoretical maximum of 2,000 being delivered to Washington. As we have seen, \$100 in bullion, given one melt and one remelt, might be expected to lose approximately 25% to scissel; it seems reasonable, therefore, that in the Mint's first effort at coinage, \$100 in bullion would yield only \$75 in coins.

Section 14 of the Mint Act also specified that the depositor would receive the same weight of silver as was received for coining. This means that in addition to the \$75 in half dismes, Washington would have received \$25 in scrap silver. He

could not have received the \$25 in coin for the simple reason that in 1792, the Mint had no other silver than that with which they had made the half dismes. The next significant deposit of silver was not entered on the Mint's records until 28 July 1794 (Stewart 1924: 44).³¹

If Washington deposited the silver bullion, the 1,500 half dismes coined from it and delivered to Thomas Jefferson on 13 July 1792 were the President's private property. The fact that about 90% of extant half dismes exhibit evidence of circulation suggests that the McAllister memorandum erred in saying that the coins were not meant for circulation, for Washington probably spent most of them. The high survival rate of these half dismes, however, suggests that the McAllister memorandum may have gotten it partially right: Washington may have presented a small number—perhaps less than a quarter of the total mintage—to selected recipients.

Weighing against this possibility is the fact that no letter of transmittal for a 1792 half dime has ever been found among Washington's voluminous papers.³² Weighing in favor of this argument is the way it explains both the unusually high survival rate and the fact that so many half dismes show signs of circulation. It would also make sense that uncirculated survivors comprise only about 10% of the population today, since some of the presentation pieces would have been spent over time.

We do know that at least five half dismes were reserved as keepsakes at the time of mintage. In Henry Chapman's thirty-ninth sale (the 4 October 1919 American Numismatic Association sale), lot 249 was a 1792 half dime described as uncirculated, with file (adjustment) marks. Chapman adds, "This specimen has an interesting history, being one of four that belonged to David Rittenhouse, the astronomer and first director of the U. S. Mint, 1792–1795, and has never been out of the family until now" (Chapman 1919: 21).³³ Interestingly, the very next lot offered (number 250) was a 1791 Washington cent with a provenance traced to Adam Eckfeldt. This confirms "Retsilla's" statement, in the previously quoted *Historical Magazine* piece from 1857, that "Mr. Eckfeldt had reserved a few of these Washington cents" (McAllister 1857: 303).

David Rittenhouse was not the only person to receive a souvenir of the first striking of coins by the United States Mint. Thomas Elder's 197th sale (9–11 October 1924), offered a collection of coins belonging to Edward H. Eckfeldt, Jr.,

31. Eric P. Newman notes the possibility that, given the paucity of silver in 1792, some of the Washington silver may have been used to strike the silver center cents and the dismes, which were created as experimental pieces (Newman to Orosz, e-mail communication, 17 February 2004).

32. Of course, no letter of transmittal has been found to document the presentation of the gold Washington Before Boston medal either, yet we know that he owned this piece (Fuld 2004: 63).

33. The authors are grateful to Len Augsburger for bringing this citation to our attention.

of Orange, New Jersey. Elder states that "Mr. Eckfeldt is of the fifth generation, descended from Adam Eckfeldt, the first coiner of the United States Mint," and includes among the highlights of the collection . . . a Martha Washington Half Disme of 1792 in almost proof condition, one of the very first impressions, and inherited by the present owner from the well known Mr. Eckfeldt of American numismatic and Mint history" (Elder 1924: 99).³⁴ Finally, if Section 18 of the 1792 Mint Act was followed to the letter, not less than three of the half dismes were reserved for assay. No records can be found, however, to demonstrate that an assay was conducted in conformance with this provision.

Statements 1 and 2, that the half dismes were struck expressly for President Washington and struck from silver coin or bullion Washington deposited for that purpose, are impossible to prove conclusively, without the unlikely invention of a time machine. We do know that President Washington left Philadelphia on Thursday, 10 May 1792, and returned on Friday, 1 June, and then left again for Mount Vernon on Wednesday, 11 July (the very day that Jefferson delivered the planchets to be struck) for a long stay, not returning to the capital city until 13 October (Baker 1897: 218, 221, 224). Washington left no record of bringing any silver from Mount Vernon, or of taking any coins with him for presentation back home in Virginia. He was in the habit of keeping diaries, and his diary for 1792 may have confirmed the accuracy of the McAllister memorandum, but unfortunately, "No Washington diaries have been found for the period from George Washington's return from his southern tour [in June of 1791] and the fall of 1794 when he accompanied federal forces to put down the Whiskey Insurrection in Western Pennsylvania" (Twohig 1999: 392).

There is one other piece of contemporary evidence that could have settled the question of whether Washington provided the silver for the half dismes. Acting Chief Coiner Henry Voigt, who commenced his duties on 1 June 1792 (Stewart 1924: 91),³⁵ began keeping an account book as soon as he started at the Mint. Voigt undoubtedly recorded in this book the source of the silver used to strike the half dismes. However, as Frank Stewart noted in 1924, "It is most unfortunate that Voigt's first account book cannot now be found. Forty years ago it was in existence and brief quotations from it were made by Evans and others" (Stewart 1924: 91). This book, which covered the period from 1 June to about 1 October 1792, is still missing, and a diligent search by the authors did not bring it to light.³⁶

34. The authors are grateful to Karl Moulton for bringing this citation to our attention. Elder erred in referring to Eckfeldt as "the first coiner of the United States Mint", for Voigt was first in that post.

35. Voigt's appointment did not become official until 29 January 1793.

36. Voigt's first account book is not in the U. S. Mint Collection at the Philadelphia branch of the National Archives, nor is it in the collection of the Historical Society of Pennsylvania, the American Philosophical Society, the Library Company of Philadelphia, or the Free

The authors have found no contemporary evidence from other sources to corroborate Eckfeldt's memory directly.³⁷ We have, however, discovered that Eckfeldt was consistent; he told the same story to more than one numismatist. Moreover, across the sweep of more than two centuries, we have found no evidence that would disprove these two claims; so if we cannot verify these two claims at this time with a "you are there" degree of certainty, neither can we refute them.

CONCLUSION

This paper has demonstrated that Adam Eckfeldt's recollection can be verified in nearly every respect.

- The half dismes were not struck from sterling silver or silver-plated tableware but rather, as Eckfeldt states, from bullion or coin.

- The half dismes survive today at an unusually high rate, consistent with early presentation to at least some degree.

- The amount struck (1500 pieces or \$75) is consistent with an initial deposit of \$100, with the loss due to preparation and scissel.

This paper has also demonstrated evidence that the 1792 half dismes were treated in ways consistent with ownership by the President of the United States.

- After the planchets were prepared, they were deposited with the cabinet officer in charge of the Mint. Jefferson personally delivered the blanks to the Mint to be struck, and the struck coins were returned to his care.

- Jefferson recorded all transactions regarding the 1792 half dismes as private records, not public records.

To all of this positive evidence, we must add the absence of any evidence to the contrary. In the more than two centuries since the 1792 half dismes were struck, there has never been any other attribution of a source from which the bullion may have come. In fact, there has never been so much as a rumor of any other person or institution providing it—only George Washington.

Ultimately, the entire question turns on the integrity of Adam Eckfeldt and the accuracy of John A. McAllister, Jr. In addition to the testaments to these men already quoted, the authors would like to share three more. Regarding Adam Eckfeldt's character, author Elizabeth B. Johnston had this to say: "Adam Eckfeldt's . . . long official life of near a half century was not only faithful unto a proverb even where faithfulness was no exception, but was marked by advance and usefulness

Library of Philadelphia. Nor are numismatic scholars such as Eric P. Newman, Q. David Bowers, or R. W. Julian aware of its whereabouts.

37. William H. Sheldon mentioned a similar story in his *Early American Cents*: "George Washington is said to have donated 'an excellent copper tea-kettle as well as two pairs of tongs' early in 1793 for the first cents" (Sheldon 1949: 7). Unfortunately, Dr. Sheldon did not share the source of this quotation, and his reputation for veracity is poor.

in other than his daily duties" (Johnston 1876: 21). George G. Evans noted that Eckfeldt's "... zeal, energy and uprightness brought him many distinctions, both as an officer and a citizen" (Evans 1886: 110). Regarding McAllister, upon his death, a New York newspaper referred to him as "one of Philadelphia's oldest and most respected citizens" (Letter from James A. Bancker to William Young McAllister, 19 December 1877, Young Papers).

After weighing all of the evidence, the authors conclude that the great preponderance of that evidence suggests that the McAllister memorandum accurately transcribes Adam Eckfeldt's recollection of the events surrounding the striking of the 1792 half dismes. It is further our view that Eckfeldt's memories are accurate in every respect except for the assertion that the 1792 half dismes were struck solely for presentation.³⁸ Eckfeldt was on the scene in Harper's cellar when the half dismes were struck, and his eyewitness account is made credible by his widespread reputation for integrity. John A. McAllister, Jr., was on the scene at the United States Mint on 9 April 1844, and carefully transcribed a record of his conversation with Adam Eckfeldt.

The sterling reputation for honesty of the two men involved indeed provides a compelling reason to acknowledge Eckfeldt's recollection that President George Washington deposited one hundred dollars in silver bullion or coin, from which all of the 1792 half dismes were struck. There is simply no evidence that would discredit the Chief Coiner's recollection. Against the unlikely prospect of substantive evidence to the contrary arising 212 years after the fact, it is reasonable to confidently take Adam Eckfeldt at his word, as did John A. McAllister, Jr., and recognize that the first President of the United States owned the bullion from which the first coins issued by the United States were struck. Frank Stewart was right; these coins deserve to be known as "Washington half dismes". Chronicler John A. McAllister, Jr., was also right, and righteous, when he dutifully, accurately penned his everlasting historical memorandum, "In conversation with Mr. Adam Eckfeldt (Apr 9, 1844) at the Mint. . . ."

ACKNOWLEDGMENTS

The authors wish to thank Leonard Augsburger, Q. David Bowers, Nicholas M. Graver, Dick Johnson, and Karl Moulton for reading the article in manuscript, providing many corrections, and offering important insights. We would also like to thank Richard Doty, Erik Goldstein, Jerome Haggerty, Erik Heikkinen,

38. Don Taxay came to a similar conclusion: after transcribing the full text of the Breen copy of the memorandum, Taxay observes, "Although Eckfeldt was slightly off on the number of half dismes struck, his memory otherwise appears remarkably undimmed" (Taxay 1966: 72). And, as we have demonstrated, Eckfeldt may not have been off on the number struck, for \$100 in bullion or specie could very well, due to scissel, have yielded only 1,500 half dismes.

Robert Wilson Hoge, R. W. Julian, Jonathan K. Kern, John J. Kraljevich, Jr., Thomas D. Rogers, Sr., P. Scott Rubin, Craig Sholley, Professor Charles W. Smith, and Pete Smith for valuable research suggestions. While offering much constructive criticism, these scholars did not all necessarily agree with every one of the authors' conclusions. Nancy Green, librarian of the American Numismatic Association, was, as always, unfailingly helpful in the research process, and David Yoon was, as always, a perceptive and sensitive editor. Barbara B. Oberg, the editor of the Jefferson Papers project at Princeton University, and Gaye Wilson of the Thomas Jefferson Foundation, Inc., generously provided essential information about Thomas Jefferson's role in this story. Most of all, the authors wish to thank the dean of numismatic scholarship in the United States, Eric P. Newman, who has read the manuscript closely, identified important issues, opened avenues to new research, and challenged assumptions. This paper owes much of its quality to his keen insight, critical eye, and matchless numismatic knowledge.

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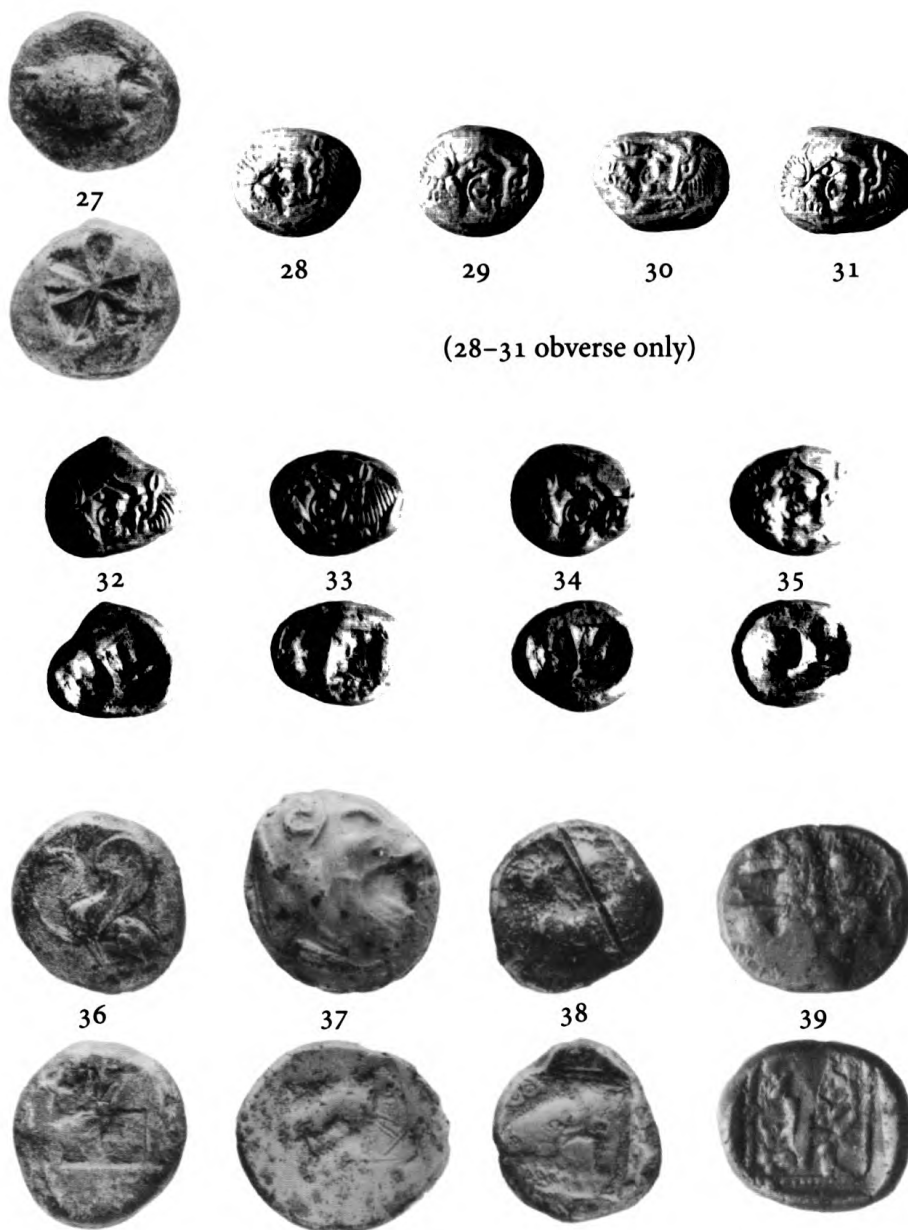
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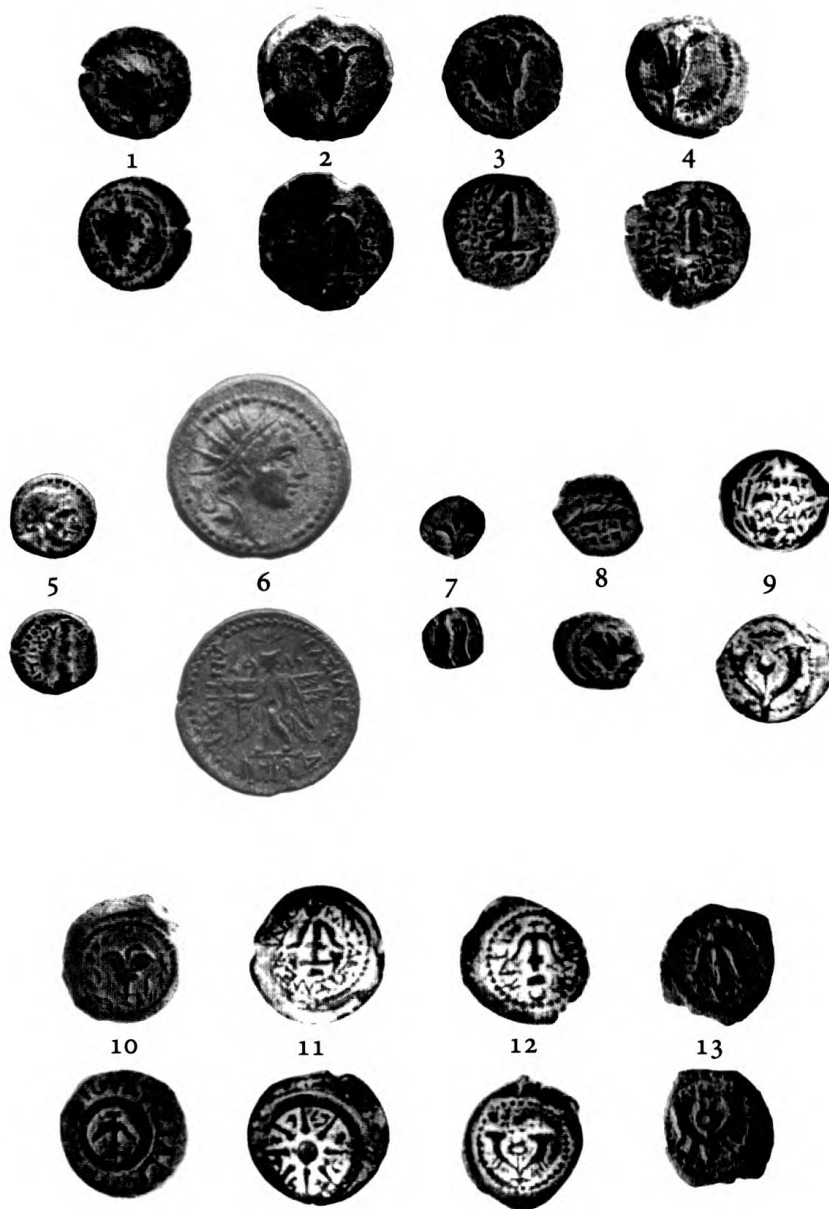
PLATES



Courtesy of the Oriental Institute of the University of Chicago
The numbers are given following Schmidt (1957)

The Apadana Coin Hoards

Plate 2



The Seleucid Coinage of John Hyrcanus I

Plate 3



1



2



3



4



5



6



7



8



9



10



11

Supplication on Roman Coins

Plate 4



1
(2:1)



2



3



4

The Myth of Daphne



5 (4:1)



6

The Myth of Daphne

Plate 6



The Revolt of Poemenius at Trier



Transitional Drahms of the Umayyad North

Plate 8



8



9



10



12



13



14



15



Transitional Drahms of the Umayyad North



Transitional Drahms of the Umayyad North

Plate 10



Supplementary Plates



Transitional Drahms of the Umayyad North



Transitional Drahms of the Umayyad North



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